RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

FREIGHT TRAFFIC ISSUE

MARCH 3, 1952

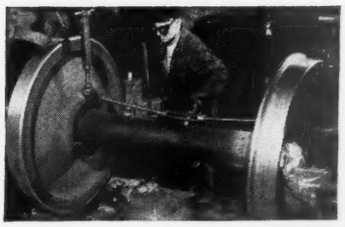
TOTAL DISTRIBUTION THIS ISSUE — 20,525

Library

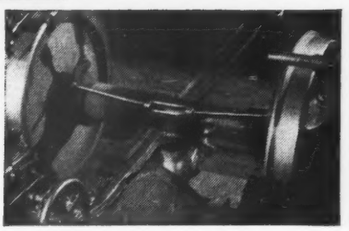
MAR 1 - 1952

TRANSPORTATION LIBRARY

Grease TIMKEN® bearings at one wheel-turning



... forget 'em till the next!



PROVED BY OPERATING TESTS. Operating tests on passenger trains in regular service now prove that grease-lubricated Timken® bearings can safely go from wheel-turning to wheel-turning without attention! In fact, in one of the tests, grease-lubricated Timken bearings ran more than 200,000 miles without lubricant being added.

OPENS WAY TO NEW ECONOMIES. As a result of these tests, the way is now open for important new railroad operating economies on Timken bearing equipped passenger cars and diesels. The man-hours previously needed for checking and addition of lubricant between wheel-turnings can be eliminated. And there is also a saving on the lubricant itself.

SWITCH TO GREASE UNDER WAY. Already, three leading railroads have made the switch from oil to grease in their Timken bearing equipped passenger cars. More than a dozen other roads are now testing wheel-turning to wheel-turning lubrication with grease-lubricated Timken bearings, with favorable results.

EASY TO CONVERT. Timken bearings can be converted from oil lubrication to grease without modifying the bearings or buying extra journal parts. And operating tests show that Timken bearings are the *only* railroad journal bearings which can consistently go a full wheel-turning period on AAR-approved grease, with no addition of lubricant.

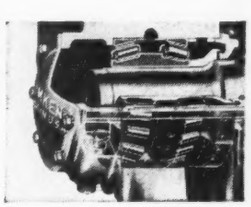
We will be glad to help you investigate the cost-saving advantages of grease lubrication of Timken bearings on *your* railroad. Write The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

The only railroad journal bearings that consistently go from wheel-turning to wheel-turning on AAR-approved grease!

TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS



NOT JUST A BALL ○ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL ⧫ AND THRUST ⊣⊢ LOADS OR ANY COMBINATION ✳

Remember this . . . ?

Burlington Route
Way of the Zephyrs
CB&Q
37000
THIS IS THE 100000TH FREIGHT CAR TO BE EQUIPPED WITH UNIT TRUCKS
TWO MILLION PEOPLE
. . . WILL SEE THIS CAR
FOR THE FIRST TIME IN THE HISTORY OF AMERICAN RAILROADING THE ANNIVERSARY MILESTONE OF A CAR SPECIALTY HAS BEEN THUS HONORED . . . TWO MILLION PEOPLE WILL SEE THIS CAR AT THE CHICAGO RAILROAD FAIR . . . THANKS TO THE BURLINGTON AND 91 OTHER RAILROADS AND PRIVATE CAR LINES WHO HAVE MADE THIS UNIT TRUCK ACHIEVEMENT POSSIBLE.
UNIT TRUCK CORPORATION . . . NEW YORK

In 1948 we showed the 100,000th UNIT car at the Chicago Railroad Fair

In February 1952 we sold the 300,000th UNIT car

UNIT TRUCK

Vol. 132, No. 9 March 3, 1952

RAILWAY AGE

With which are incorporated the Railway Review, the Railroad Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Mark Office in Canada.

Simmons-Boardman Publishing Corporation: James G. Lyne, President. Samuel O. Dunn, Chairman Emeritus. J. S. Crane, Vice-President and Secretary. C. Miles Burpee, Harry H. Melville, C. W. Merriken, John R. Thompson, William H. Schmidt, Jr., J. S. Vreeland, Fred W. Smith, Vice-Presidents. Robert G. Lewis, Assistant to President. Arthur J. McGinnis, Treasurer. Ralph E. Westerman, Assistant Treasurer.

EDITOR ..... James G. Lyne
EDITORIAL CONSULTANT ..... Samuel O. Dunn
MANAGING EDITOR ..... C. B. Tavenner
WESTERN EDITOR ..... William H. Schmidt, Jr.
NEWS & FINANCIAL EDITOR .... Gardner C. Hudson
WASHINGTON OFFICE . . .
Walter J. Taft Joe W. Kizzia
TRAFFIC & TRANSPORTATION DEPARTMENT . . .
Robert G. Lewis John W. Milliken
John S. Gallagher, Jr.
MECHANICAL DEPARTMENT . . .
C. B. Peck E. L. Woodward
H. C. Wilcox C. L. Combes G. J. Weihofen
ELECTRICAL DEPARTMENT ..... Alfred G. Oehler
ENGINEERING DEPARTMENT . . .
M. H. Dick Henry E. Michael
Radford E. Dove Ralph M. Schmidl
PURCHASES & EQUIPMENT ..... Fred C. Miles
SIGNALING & COMMUNICATIONS DEPARTMENT.. John H. Dunn
WESTERN NEWS DEPARTMENT .. Arthur M. Cox, Jr.
ASSOCIATE EDITOR ..... Charles Layng
LIBRARIAN ..... Edith C. Stone
EDITORIAL ASSISTANT ..... Elaine C. Farrar

Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price, $3.00 a year to railroad employees only in U. S., U. S. possessions, Canada and Mexico, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, $10.00 a year; in other countries, $15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues $1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

IN THIS ISSUE

EDITORIAL COMMENT:

Whose Job Is It to Prevent Railroad Starvation? 53
Freight Car Repair Costs 54

FREIGHT TRAFFIC ARTICLES:

Rails Across Lake Michigan 55
How Two-Way Talk-Back Speakers Save Time in Milwaukee L.C.L. Transfer .. 59
Industrial Development on the M.-K.-T. 62
Pool Cars Bring L.C.L. Back to Rails 64
C.N.J. Combines New Station and Trucks to Improve L.C.L. Service 66

GENERAL ARTICLES:

Deferred Maintenance Reaches $1,050 Million 71
New Light Repair Facilities Improve Working Conditions 72

NEWS FEATURES:

F.R.P. Has Made Railroads "More Public Relations Conscious," Young Says 11
Denial of Ex Parte 175 Plea Would Confront Roads with "Confiscatory" Rate Level—Burgess 12
Faricy: Roads Still Face $2 Billion Expenditure for Cars and Locomotives 14
New Services and Publications of Interest to Shippers 17

DEPARTMENTS:

News of the Railroad World 11
New and Improved Products 51

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Branch Offices: 1081 National Press Building, Washington 4, D. C.—Terminal Tower, Cleveland 13, Ohio.—Terminal Sales Building, Portland 5, Ore.—1127 Wilshire Boulevard, Los Angeles 17, Cal.—1204 Russ Building, San Francisco 4, Cal.—2909 Maple Avenue, Dallas 4, Tex.

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia American Builder
Marine Engineering & Shipping Review Marine Catalog & Buyers' Directory
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.

Train Load Increased 32%

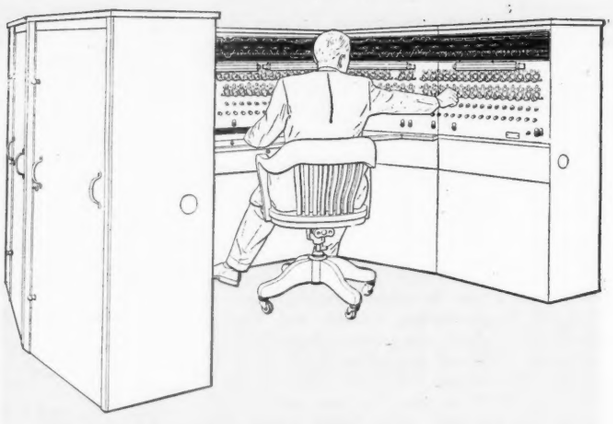
. . . in <u>one</u> year!

with "UNION" C.T.C. saving 17,498 freight train miles

HERE'S THE RECORD*

1. Reduced road time of through freight trains by 648 hours per year.
2. The tonnage of through freight trains was increased 32%.
3. Saved 17,498 freight train miles per year.
4. Saved 2,190 car days per year.
5. Eliminated two sidings and 5 main track switches.
6. Reduced cost of directing train movements.
7. Reduced annual operating expenses.
8. Increased capacity of line for future traffic.
9. Annual return over 3% interest:
   On Capital Investment—21.5%
   On Total Cost —19.9%

Factual data will be supplied on request.



"UNION" Centralized Traffic Control can reduce terminal-to-terminal time with safety and pay its way through reductions in operating expenses. May we help you?

UNION SWITCH & SIGNAL
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY
SWISSVALE, PENNSYLVANIA
NEW YORK • CHICAGO • ST. LOUIS • SAN FRANCISCO

WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, twelve months
1951 ..... $10,390,672,580
1950 9,473,093,128

Operating expenses, twelve months
1951 ..... $8,041,223,177
1950 7,059,242,353

Taxes, twelve months
1951 ..... $1,203,238,466
1950 1,194,615,254

Net railway operating income, twelve months
1951 ..... $942,696,259
1950 1,039,621,540

Net income, estimated, twelve months
1951 ..... $693,000,000
1950 783,000,000

Average price railroad stocks
February 26, 1952 ..... 55.22
February 27, 151 ..... 57.17

Car loadings, revenue freight
Seven weeks, 1952 5,030,658
Seven weeks, 1951 4,974,289

Average daily freight car surplus
February 23, 1952 8,322
February 24, 1951 1,331

Average daily freight car shortage
February 23, 1952 3,158
February 24, 1951 35,245

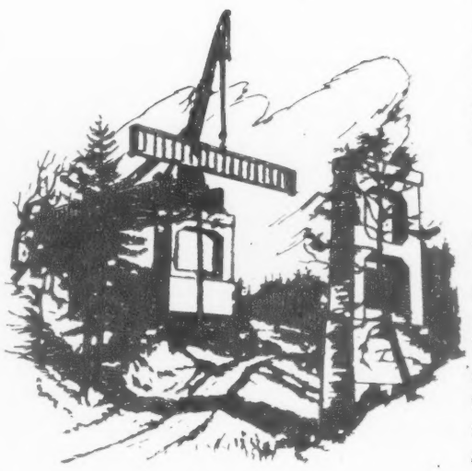
Freight cars delivered
January 1952 8,642
January 1951 5,949

Freight cars on order
February 1, 1952 120,251
February 1, 1951 144,758

Freight cars held for repairs
February 1, 1952 91,689
February 1, 1951 90,045

Net ton-miles per serviceable car per day
December 1951 (preliminary) 939
December 1950 988

Average number railroad employees
Mid-January 1952 1,221,846
Mid-January 1951 1,254,110



In This Issue . . .

HOW POOL CARS FOR L.C.L. FREIGHT help to provide shippers with better service (page 64); how two-way speakers speed up operations at the Milwaukee's Galewood transfer (page 59); how the Ann Arbor "goes to sea" across Lake Michigan (page 55); how the Katy promotes industrial development along its lines (page 62); and a description of the Jersey Central's new l.c.l. transfer, with coordinated truck service, at Elizabeth, N. J. (page 66).

IN THESE DAYS OF CHRONIC CAR SHORTAGES fast and efficient repair of freight cars is more necessary than ever. Proof of the fact that facilities for such repair need not be large or expensive in order to be efficient, is the new shop just opened by the Union, of Pittsburgh, at North Bessemer, Pa., which is the subject of an illustrated feature article beginning on page 72.

In Washington . . .

"ANY ATTITUDE OF COMPLACENCY" regarding box car supply in 1952 is unjustified, according to the latest monthly summary of the national transportation situation by C.S.D. Chairman Arthur H. Gass. "With steel allocations for new cars seriously curtailed," Mr. Gass said, "additional ownership cannot be expected; if commodities requiring box cars are to be moved with dispatch everyone must work toward better utilization of existing equipment." Mr. Gass' comments on the 1952 freight car situation tied in closely with a prediction made at Chicago by R. Arthur Williams, president of the Standard Railway Equipment Manufacturing Company, who sees substantially smaller production of freight cars in 1952 than in 1951—from 55,000 to 70,000 new units, against about 95,000 last year.

MORE THAN TWO BILLION DOLLARS must be spent by the railroads for new freight cars and locomotives in the next two years if they are to eliminate car shortages and be in position to meet transportation demands which war would produce. This expenditure, A.A.R. President William T. Faricy told the Interstate Commerce Commission, would cover acquisition of about 200,000 new freight cars and about 7,000 locomotives. His statement was made in support of the railroads' position in the Ex Parte No. 175 rate case, hearings on which are reported in the news columns.

WEEK AT A GLANCE

. . . And Elsewhere

FORMAL ORGANIZATION of a new concern called Rail-Trailer Company took place in Chicago last week. This company plans to devote its entire attention to developing movement of loaded highway trailers on flat cars for the account of interested railroads. Since the flat car shortage has been a deterrent to some roads desiring to handle this kind of traffic, Rail-Trailer has completed plans for the leasing of flat cars fully equipped for accommodation of loaded trailers. The company is prepared, it says, to undertake studies of potential traffic volume and revenues—together with necessary service requirements—needed for determination of the value of Rail-Trailer movement on any individual railroad.

PRIVATE INDUSTRIAL CREDIT is reportedly being successfully used to improve Mexican railroad service by expanding locomotive and car fleets of the government owned National of Mexico. The Monterrey Brewery, reports say, has granted credit of $1,788,880 for four 3,200-hp. diesels; the Monterrey Glassworks has underwritten two more of the same; the American Smelting & Refining Co. has financed purchase of 150 freight cars, and, with the Mexican Iron & Steel Foundry, has advanced $3,472,000 for diesels. In this country, insistence upon a square deal for the railroads would be an equally effective, and substantially cheaper, form of industrial credit.

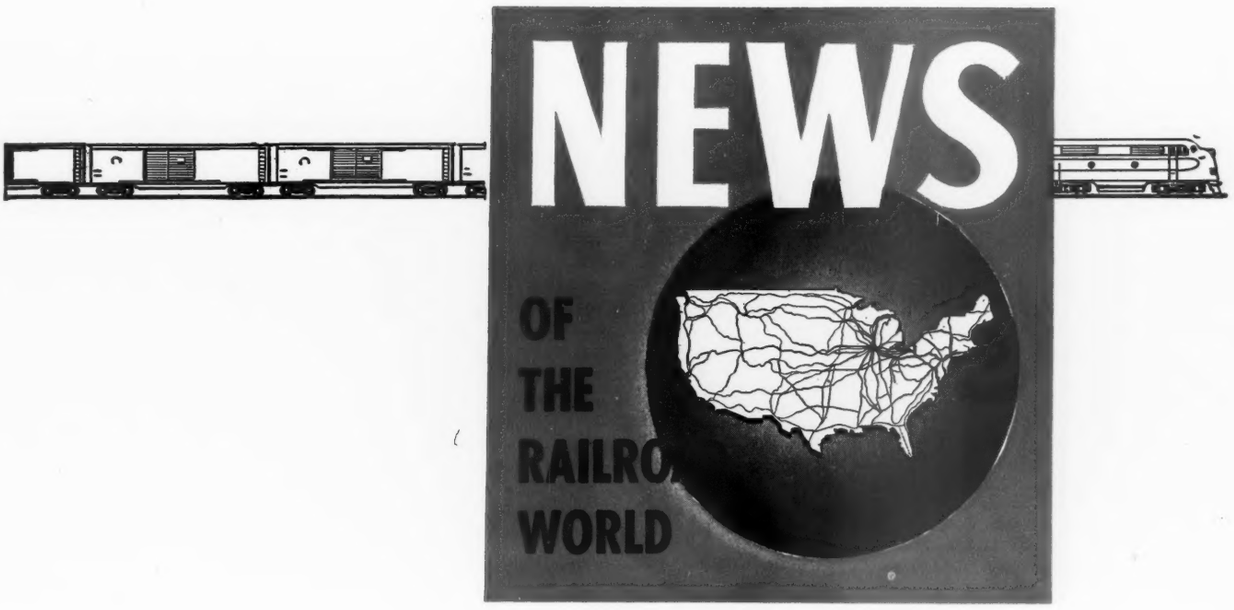
"THE SHIPPER IS ONLY KIDDING HIMSELF when he thinks he is saving the cost of cleaning a dirty car by releasing it to the railroad," says the Clean Car Committee of the Mid-West Shippers Advisory Board. Thorough cleaning of all cars by shippers and receivers, the committee points out, would save the railroads millions of dollars a year, the end results of which would be "a financially and physically stronger railroad plant" and "better transportation service for shippers."

FLEETS OF CARS are already in readiness for operation on the Quebec, North Shore & Labrador, for the moment when that new ore-carrying railroad is opened. The passenger cars, which are labeled Q.N.S. & L., appear—when seen from passing trains on the Canadian Pacific—to be refurbished second-hand equipment from a number of U. S. roads, parked in a yard near the Park Street station of the C. P. in Montreal. The fleet of freight cars appears to be new, and includes box cars and hoppers. The equipment will have to be moved part way to the Q. N. S. & L. by water, since "the wilderness road" has no physical connection with any other railroad.

OHIO'S BELT CONVEYOR ISSUE—whether or not the right of eminent domain should be granted to Riverlake Belt Conveyor Lines, Inc., for their proposed 103-mile coal and ore carrier—is still a "live" matter throughout the Buckeye state. Proponents of the belt have been seeking endorsement of the plan from a widespread segment of Ohio industry. Railroads opposing the scheme have indicated that they will not retreat further from the inroads of specialized carriers. See news pages.

BUS PACKAGE EXPRESS TRAFFIC is improving, it is reported, as Greyhound continues its consistent efforts to build this little known portion of its business.

"IN RECOGNITION of his extraordinary contribution in the field of public relations by stimulating better understanding of the railroads . . . and their importance to all Americans," Robert M. Van Sant, director of public relations of the Baltimore & Ohio and one of the country's veteran railroad public relations men, has been given the special public relations award for 1951 by the Federation for Railway Progress. Pictures of recipients of other F.R.P. 1951 awards appear in the news pages.



F. R. P. Has Made Railroads "More Public Relations Conscious," Young Says

He thinks industry is "most backward," that the Express Agency "ought to be abolished," and that "Train X" will solve passenger-deficit problem; still interested in New York Central

During the first five years of its existence, the Federation for Railway Progress has made the railroad industry "more public relations conscious," according to Robert R. Young, the federation's founder and chairman.

Mr. Young, who is also chairman of the Chesapeake & Ohio, made this comment at a press conference following the federation's fifth-anniversary ceremonies in Washington, D. C., on February 21. As noted elsewhere in this issue, the ceremonies included presentations by Mr. Young of federation awards for 1951.

Other press-conference comments of the C. & O. chairman included his characterization of the railroad industry as the "most backward industry in the world"; his statement that the Railway Express Agency is "120 years behind the times" and "ought to be abolished"; his call for general adoption of the C. & O.'s projected "Train X" to solve the passenger-deficit problem; and his discussion of recent developments in connection with his undertaking to obtain representation on the New York Central board of directors.

"Heaven-Sent" Savings

In Mr. Young's opinion, the railroads survived the postwar inflation period "solely" because dieselization brought savings of about "a billion dollars a year." These "Heaven-sent" savings were "extraordinary and non-recurring," he also said, adding that he did not see now how another "break" like that could be expected "in the next 10 years of inflation which we're almost certain to have."

In support of his statement that the federation had made the railroads "more public relations conscious," Mr. Young noted that the railroad representative on the federation's executive council—Walter J. Tuohy, who is also president of the C.&O.—has been serving as chairman of a committee established by eastern railroads to handle public relations on the matter of subsidized truck competition. The federation's president, Thomas J. Deegan, Jr., vice-president of the C.&O., has been serving that Tuohy committee in an advisory capacity, Mr. Young also noted.

"Train X"

The passenger-service deficit was listed by Mr. Young as one of two pressing problems (the other was truck competition) which the railroads "must solve." As noted above, he thinks the projected "Train X" is the answer; and he lamented the C.&O.'s failure, thus far, to interest other roads in cooperating in development and introduction of the train.

Engineers of the Pullman-Standard Car Manufacturing Company agree with the C.&O. as to the potentialities of "Train X," Mr. Young also asserted. He added, however, that Pullman-Standard had found that it could not continue spending money on the train's development, because the N.Y.C. was "not interested," since operation of the train on its line would require platform changes. Mr. Young made it plain that he considers talk of platform changes as an "excuse," and he is now trying to interest western roads which have no "platform problem."

Meanwhile, the F.R.P. chairman referred to the N.Y.C.'s recent announcement that it had retained Robert Heller & Associates in connection with a study of its passenger operations (*Railway Age*, February 11, page 18). The Pennsylvania has also retained the Heller firm, Mr. Young added (*Railway Age*, February 18, page 8). And he went on to say that the Pullman Company has already received a Heller report on its operations.

It was "interesting," Mr. Young thought, that this report contains statements along lines of a presentation he made in an affidavit filed in court "six years ago when I offered to put up $500 million" and take over Pullman operations. Later on, Mr. Young charged that a "black market" in Pullman accommodations is "still continuing."

Expects Only "Slow Reform"

In response to questions about the federal regulatory set-up, the F.R.P. chairman said he would abolish the Interstate Commerce Commission "in its present form"; but he explained

Eastern Roads P. R. Program

William White, president of the Lackawanna and chairman of the public relations committee of the Eastern Railroads Presidents Conference, on February 27 made the following statement on the public relations program of the Eastern railroads:

"Several statements have been published recently from unauthorized and imperfectly informed sources as to the employment of the public relations firm of Carl Byoir & Associates by the Eastern Railroad Presidents Conference and regarding the objectives of the Byoir assignment.

"The simple facts are that the Eastern Railroads employed the Byoir organization some three years ago because of the rapid development of competitive forms of transportation making commercial use of public facilities in competition with these railroads. More recently the eastern railroads made a further arrangement with the Byoir organization to give them additional counsel and assistance on public relations aspects of the chronic problem of the railroad industry, especially acute in the East because of its failure to attain a level of earnings adequate to provide and attract investment capital in the quantity required for the protection of the public interest in continued railroad transportation.

"Since the Eastern Railroads do not have a fully staffed public relations organization, they obviously had to employ outside assistance to help with these problems—or as an alternative forego grappling with them. Action in employing the Byoir organization for these purposes was unanimous on the part of the membership of the Eastern Railroad Presidents Conference."

that his criticism of the commission was addressed to what he considers its failure to keep pace with developments. He favors regulation, and he would leave the regulatory authority with power to fix both maximum and minimum rates. But, he added, the regulation ought to be "intelligent."

As Mr. Young appraises the situation in Congress, the current consideration of transport problems may bring changes in the regulatory set-up. The most that he expects from that source, however, is "slow reform."

He was asked if he thought the railroads should make more extensive use of radio in train operations. When he replied in the affirmative, he was asked if he favored enactment of proposed legislation which would give the I.C.C. authority to require radio installations. "A better way would be to inspire" them, was the answer.

At the same time, Mr. Young cautioned the reporters that they should keep train accidents in proper perspective. He added that air travel has been about "20 times" as hazardous as rail travel, and that no passenger has been killed on the C. & O. in 35 years.

Still Interested in N.Y.C.

As to the N.Y.C. directorship, Mr. Young indicated that he might seek it again if he were unable to arrange for election of one whom he would consider a satisfactory representative. Mr. Young's previous application for authority to accept election to the N.Y.C. board while retaining his membership on the C. & O. board was denied by the I.C.C.

His discussion of the matter at the press conference included a statement to the effect that he would want to be sure of a place on the N.Y.C. board before resigning from the C. & O. board, if he should adopt that plan for removing the dual-directorship issue.

Denial of Ex Parte 175 Plea Would Confront Roads With "Confiscatory" Rate Level—Burgess

If the plea for increased rates in Ex Parte No. 175 is denied a "great majority" of the nation's railroads will be confronted with a confiscatory rate level, E. H. Burgess, chief counsel for the railroads, told the Interstate Commerce Commission last week.

Mr. Burgess, vice-president and general counsel of the Baltimore & Ohio, led off in oral argument in the rate case. The argument, scheduled to continue for some 29 hours, was the final session in which parties could present views for or against the proposed 7.6 per cent rate boost.

The I.C.C. should "lift the lid" which it has imposed on railroad freight rates, Mr. Burgess declared. He said the increase of $1,400,000,000 in the cost of producing transportation since 1949 has "just been more than the industry can absorb."

"By all applicable standards, net income under the proposed rates would be well within the zone of reasonableness," Mr. Burgess argued. If the increase requested were granted in full, it would produce only 4.6 per cent return on net investment in 1952, he said.

THIS MODEL RAILROAD DISPLAY, featuring the Duluth, South Shore & Atlantic, was operated for several hours a day in the First National Bank of Marquette, Mich., during the 1951 Christmas season. The display, which included both steam and diesel locomotive models, and freight and passenger trains, included several hundred feet of double-track line constructed on a ledge running over the tellers' windows for the entire length of the bank lobby.

Mr. Burgess was among four railroad spokesmen summing up the railroad case. Others were William L. Grubbs, general counsel of the Louisville & Nashville, who spoke for Southern roads; Harry C. Barron, counsel for the Western carriers, and Edward A. Kaier, general attorney of the Pennsylvania and spokesman for Eastern roads.

The railroads are seeking the full 15 per cent increase they originally requested in Ex Parte 175. Last August the I.C.C. authorized a general increase of 6.6 per cent, but the roads say this was inadequate and have called it "most disappointing." Last October they filed a request for the balance of the 15 per cent.

Despite the fact that railroad operating revenues in 1951 were more than a billion dollars above those of 1950, net income for the year was actually substantially less, Mr. Burgess said. This drop-off in net earnings at a time when railroads are hauling near-record volumes of freight traffic is "a matter of greatest concern," Mr. Burgess continued.

"Fair Return"

Among a series of "tests" which Mr. Burgess asked the I.C.C. to make was that of "fair return." He said 94 per cent of the roads earn less than six per cent, and he asked the commission to consider the rates of return traditionally allowed other public utilities.

During his argument, Mr. Burgess was asked by Commissioner Splawn whether he thought the roads could earn more without losses in traffic wiping out the anticipated benefits of higher rates. Mr. Burgess replied that the only thing holding down railroad earnings is the existing "rate lid."

"Under the present rate and expense level the carriers' opportunity to earn a fair return is now gone," Mr. Burgess said. "And if present rates are not increased, that opportunity — the mainspring of all private enterprise— will continue to be gone."

Mr. Grubbs told the commission that unless the rail carriers are permitted to earn something like a fair return in a period of high economic activity such as the present, they are "doomed to disaster."

Southern Roads

Failure of net income to follow the upward march of total revenues has placed Southern roads in an "uneasy and hazardous position," Mr. Grubbs declared. A sharp drop in traffic would place them in a serious situation, he said.

The "entirely inadequate" rate increase of 6 per cent authorized since Korea falls far short of covering even increased wage costs, to say nothing of increases in the prices of equipment and materials and supplies, he told the commission.

Mr. Barron of the Western roads warned the commission that it must choose between starving the railroads into nationalism or permitting them to charge rates that will provide the kind of service the country requires.

"Starve the railroads and be a party to nationalization if you desire," Mr. Barron declared, "but you will leave to posterity the knowledge that you failed to heed the admonition of Congress to prescribe rates that will enable the railroads to provide adequate and efficient transportation."

As to "discrimination" against Western carriers in recent rate decisions, Mr. Barron argued that "no reason" exists why these carriers should not be given as great an increase as roads in other territories. Some Western roads are "actually scraping the bottom of the barrel to make ends meet," he said.

Mr. Kaier told the commission that many railroads already are being forced by inadequate income to cut down on maintenance work and to curtail spending for improvements and expansion. Still further curtailment will be necessary in coming months unless rates are increased to a level more in

FEDERATION OF RAILWAY PROGRESS AWARDS for 1951 went to Robert M. Van Sant, director of public relations of the Baltimore & Ohio, "for outstanding work in stimulating public understanding of railroads"; to Lewis W. Britton, of Traffic World, for "his reporting of railroad news emanating from the Interstate Commerce Commission"; and to Harold Neiswender, Great Northern ticket agent at Spokane, Wash., "for his extraordinary work in teaching school children of Spokane some of the elementary facts of railroading." In the picture above Mr. Van Sant, left, Mr. Neiswender and Mr. Britton, right, receive the awards from Robert R. Young, second from right, founder and chairman of F.R.P. Below, Mr. Neiswender is shown with President Truman at the White House; between them is Robert M. Drysdale, Jr., executive vice-president of the federation. Mr. Neiswender, whom the federation designated as "Railroad Man of the Year," has taken some 4,000 Spokane youngsters on station tours and train rides in the past two years.

keeping with increased operating costs, Mr. Kaier said.

"The inadequacy of revenues, springing from an inadequacy of rates, to build and maintain an improved plant is in strange contrast to the urgings of government officials charged with responsibility in the matter, who recommend that the railroads spend billions of dollars to buy cars and other equipment, to improve their entire plant, in order to be ready for any emergency that may arise," he continued.

The "absurdity" of the present rate structure is well illustrated in the East, Mr. Kaier declared. He said Eastern railroads, in the five postwar years, earned $4,000,000 less in net railway operating income than in the last five years of the depression, 1936 through 1940.

During the first three days of argument—which was continuing as this issue went to press— several government agencies restated their opposition to a rate increase. These included the Department of Agriculture, Office of Price Stabilization, and General Services Administration. The G.S.A. suggested that present rates should be tested for a "longer period" before further increases are granted.

Faricy: Roads Still Face $2 Billion Expenditure For Cars and Locomotives

The railroads must spend about $2,180,000,000 for new freight cars and locomotives in the next two years, if they are to eliminate recurring car shortages and be in position to meet the demands which war would produce, William T. Faricy, president of the Association of American Railroads, declared in a February 22 statement to the Interstate Commerce Commission.

The A.A.R. president set something of a precedent by appearing as a witness in an ex parte rate case. He testified in support of the railroads in Ex Parte No. 175, but his statement was confined "to the need for freight cars and locomotives, and the cost involved if this need is to be met."

"The need for additional freight cars and locomotives is not a matter of speculation nor a question for the future. It is a pressing and immediate need," Mr. Faricy declared.

Major relief in meeting freight car demands must come through an increase in car ownership, Mr. Faricy pointed out. To attain ownership of 1,850,000 cars within the next two years — the railroad goal — at least 200,000 new cars must be constructed. These would cost, at 1951 average prices, approximately $1,140,000,000.

Mr. Faricy explained that immediately after the outbreak of fighting in Korea the railroads adopted a program aimed at increasing their freight car ownership from 1,724,088 cars to a total of 1,850,000, or a net increase of about 125,000. It was believed this increase in ownership could be attained in two years from the time a construction program of 10,000 cars a month was reached and sustained.

Because it has been impossible to obtain adequate materials, the 10,000-car-a-month program has not been carried out and the present ownership of 1,754,000 cars represents a net gain of only 30,744, Mr. Faricy reported.

"The car construction program necessary to meet a goal of 1,850,000 cars is thus behind schedule. The prospective need for new cars therefore is correspondingly more acute."

N. I. T. LEAGUE COMMITTEE CHAIRMEN

Chairmen of the National Industrial Traffic League's various standing and special committees, for the league's current fiscal year, as appointed by President A. G. Anderson, are as follows:

STANDING COMMITTEES

AERONAUTICS
H. R. Brashear (Chairman), Dir. Traffic Service, Aircraft Industries Assn. of America, 610 Shoreham Bldg., Washington 5, D. C.

BILL OF LADING
Paul J. Bond (Chairman), Genl. Traffic Mgr., The Pure Oil Co., 35 E. Wacker Drive, Chicago 1, Ill.

CAR DEMURRAGE AND STORAGE
W. A. Mayfield (Chairman), Genl. Traffic Mgr., Swift and Company, U. S. Yards, Chicago 9, Ill.

CLASSIFICATION
S. L. Felton (Chairman), Genl. Traffic Mgr., Acme Steel Company, 2840 Archer Ave., Chicago 8, Ill.

CONTRACT MOTOR CARRIER
Perry M. Gish (Chairman), Genl. Traffic Mgr., American Radiator & Standard Sanitary Corp., P. O. Box 1226, Pittsburgh 30, Pa.

COOPERATE WITH TRANSPORTATION EXECUTIVES
W. B. Shepherd (Chairman), Genl. Traffic Mgr., Aluminum Company of America, 801 Gulf Bldg., Pittsburgh 19, Pa.

DIVERSION AND RECONSIGNMENT
W. V. Wheat (Chairman), Traffic Manager, Peoria Board of Trade, 330 S. Washington St., Peoria 2, Ill.

EXPORT AND IMPORT TRAFFIC
A. J. Kelley (Chairman), Treasurer, D. C. Andrews & Co., Inc., 327 S. LaSalle St., Chicago 4, Ill.

EXPRESS
R. J. Ross (Chairman), Traffic Manager, Continental Baking Co., 630 Fifth Ave., New York 20, N. Y.

FINANCE AND AUDITING
R. R. Flynn (Chairman), Traffic Manager, Inland Steel Co., 38 S. Dearborn St., Chicago 3, Ill.

FREIGHT CLAIMS AND CLAIMS PREVENTION
Leland D. Smith (Chairman), Traffic Manager, Consolidated Chemical Industries, Inc., 640 Mellie Esperson Bldg., Houston 2, Tex.

HIGHWAY TRANSPORTATION
Harry F. Suiter (Chairman), Genl. Traffic Mgr., Merck & Co., Inc., P.O. Box 88, Rahway, N.J.

INLAND WATERWAYS
Louis A. Schwartz (Chairman), Genl. Mgr., New Orleans Traffic and Transportation Bureau, 408 International Bldg., New Orleans 12, La.

INTERCOASTAL AND COASTWISE TRANSPORTATION
Walter A. Rohde (Chairman), Mgr. Trans. Dept., San Francisco Chamber of Commerce, 333 Pine St., San Francisco 4, Calif.

LEGISLATIVE
Frank A. Leffingwell, (Chairman), Secy.-Treas. Southwestern Industrial Traffic League, 1515 Praetorian Bldg., Dallas 1, Tex.

L.C.L. & MERCHANDISE
J. C. Allen (Chairman), Genl. Traffic Mgr., Sears, Roebuck & Co., 925 S. Homan Ave., Chicago 7, Ill.

MEMBERSHIP
R. C. Waehner (Chairman), Genl. Distribution Mgr., Lever Brothers Co., 390 Park Ave., New York 22, N. Y.

MOTOR CARRIER RATE AND CLASSIFICATION
Wm. H. Ott, Jr. (Chairman), Genl. Traffic Mgr., Kraft Foods Company, P. O. Box 1163, Chicago, Ill.

PASSENGER TRAFFIC
J. K. Hiltner (Chairman), Genl. Traffic Mgr., United States Pipe & Foundry Co., Burlington, N. J.

POSTAL SERVICE
S. F. Kirby (Chairman), Asst. Genl. Traffic Mgr., Montgomery Ward & Co., 619 W. Chicago Ave., Chicago 7, Ill.

RATE CONSTRUCTION AND TARIFFS
J. W. Peters (Chairman), Traffic Manager, Delco-Remy Div., General Motors Corp., Anderson, Indiana

TRANSPORTATION INSTRUMENTALITIES AND CAR SERVICE
Frank G. Moore (Chairman), Traffic Manager, Columbia-Southern Chemical Corp., 5th Ave. at Bellefield, Pittsburgh 13, Pa.

WEIGHING
W. A. Cramer (Chairman), Traffic Manager, United States Steel Co., Room 1584, 208 S. LaSalle St., Chicago 90, Ill.

SPECIAL COMMITTEES

BUDGET OF THE INTERSTATE COMMERCE COMMISSION
R. A. Cooke (Chairman), Mgr. Traffic Dept., American Newspaper Publishers Assn., 370 Lexington Ave., New York 17, N. Y.

EX PARTE 104, PART II
John B. Keeler (Chairman), Consultant, Koppers Company, Inc., Koppers Bldg., Pittsburgh 19, Pa.

EX PARTE 175
Lowe P. Siddons (Chairman), Traffic Manager, Holly Sugar Corp., P. O. Box 1052, Colorado Springs, Colo.

GOVERNMENT WAR REPARATION CASES
C. H. Beard (Chairman), Genl. Traffic Mgr., Union Carbide & Carbon Corp., 30 East 42nd St., New York 17, N. Y.

I. C. C. FEES
R. A. Cooke (Chairman), Mgr., Traffic Dept., American Newspaper Publishers Assn., 370 Lexington Ave., New York 17, N. Y.

PALLETIZATION
C. S. Decker (Chairman), Genl. Traffic Mgr., The Borden Company, 350 Madison Ave., New York 17, N. Y.

REORGANIZATION OF EXECUTIVE DEPARTMENTS OF THE U. S. GOVERNMENT
Lee J. Quasey (Chairman), Commerce Counsel, Natl. Live Stock Producers Assn., 139 N. Clark St., Chicago 2, Ill.

STATUTORY RATE MAKING
Rupert L. Murphy (Chairman), Traf. Mgr. & Attorney, Georgia-Alabama Textile Traffic Assn., 740 Citizens & Southern Natl. Bank Bldg., Atlanta 3, Ga.

TRAFFIC AND TRANSPORTATION EDUCATION
R. A. Ellison (Chairman), Mgr. Transportation Dept., Cincinnati Chamber of Commerce, Federal Reserve Bank Bldg., Cincinnati 2, Ohio.

TRANSPORTATION COSTS AND ACCOUNTING
Harry D. Fenske (Chairman), Asst. Vice Pres., Great Lakes Steel Corp., Ecorse, Detroit 29, Mich.

TRANSPORTATION OUTLOOK AND POLICY
A. H. Schwietert (Chairman), Traffic Director, The Chicago Assn. of Commerce & Industry, One N. LaSalle St., Chicago 2, Ill.

UNIFORM CLASSIFICATION
S. L. Felton (Chairman), Genl. Traffic Mgr., Acme Steel Co., 2840 Archer Ave., Chicago 8, Ill.

"The political franchise, wisely used, is the best safeguard of our economic franchise. Political dictatorship leads to economic dictatorship. Moreover, if through our political franchise we voluntarily transfer to governments continually increasing degrees of management and control over our economic affairs, thus gradually establishing economic dictatorship, we are in grave danger of ultimately losing our political freedom. . . .

"The transition from free enterprise to state capitalism can occur gradually and by subtle means. It is possible to impair the efficiency of a good machine by tinkering with it too much and by interfering with its automatic controls and self-adjusting devices. If we want to preserve our free enterprise system . . . then we must do everything within our power to maintain the conditions under which the free economy can grow and prosper, and continue to promote the general well-being of all the people."

—From an address to the Fort William Ont., Chamber of Commerce by N. R. Crump, vice-president of the Canadian Pacific.

. . Improvement of the locomotive fleet is another major program of the industry, Mr. Faricy continued. He discussed this need "only in a general way," but noted that improvements will lead to greater capacity and efficiency, and ultimately to lower costs.

In 1951, 3,465 units of new locomotive power were installed. It was Mr. Faricy's "considered judgment" that it would take at least two years of production at the 1951 rate to keep pace with demand. Assuming the industry has the necessary money and materials available, the cost of such two-year program for 7,000 locomotive units will be about $1,040,000,000.

Mr. Faricy told the I.C.C. he would not undertake to discuss other demands facing the railroads in making necessary capital improvements. But he did invite attention to the fact that railroads spent about $351,000,000 on improvements to fixed plant and facilities in 1951. He then added that he had no reason to anticipate that such expenditures will be substantially less in 1952-1953, provided earnings permit and materials are made available.

One railroad—the Southern system—plans to spend $55,000,000 this year for new equipment, construction and addition to plant if the I.C.C. grants the railroads' current petition for increased freight rates, Harry A. DeButts, its president, said. "The extent of our expenditures will be, of necessity, governed by what action the commission takes," Mr. Debutts added, "and I am hopeful that its decision will be favorable and, therefore, in the public interest."

Mr. Debutts said the Southern expects to open bids this week on construction of 3,500 freight cars (*Railway Age*, February 4, page 97), and that the road's goal of 100 per cent dieselization will be approached when deliveries are completed of the 100 diesel units ordered late last year (*Railway Age*, October 29, 1951, page 52). When these units are all delivered, he pointed out, the Southern will have a total of 847 units, which, it is estimated, will handle 96 per cent of the road's gross-ton miles, 95 per cent of passenger-car miles and 85 per cent of yard switching.

New Cars, Modernization, Suggested for L. I.

Prompt initiation of major improvements to the electrified-territory passenger cars of the Long Island, including purchase of 50 new cars and modernization of existing cars, was asked by the Long Island Transit Authority in a petition filed last week with the United States District Court in Brooklyn, N. Y. "A large majority of the [Long Island's] cars are old, and in their present condition unsatisfactory," the petition added.

The present condition of the road's cars "generally is below any reasonable minimum standard, and they are depreciating further," the petition said, adding that 296 of the older cars were built with end posts "below required modern standards of strength" and should be retired "as rapidly as is physically and financially possible." The 50 new cars would include the 20 for which bids already have been requested (*Railway Age*, September 10, 1951, page 62). Because of the increased seating capacity of the proposed new and modernized cars, as well as decreased car requirements resulting from sale of the Rockaway Beach branch to New York City, at least 200 of the oldest electric cars could be eliminated within five years, the petition continued.

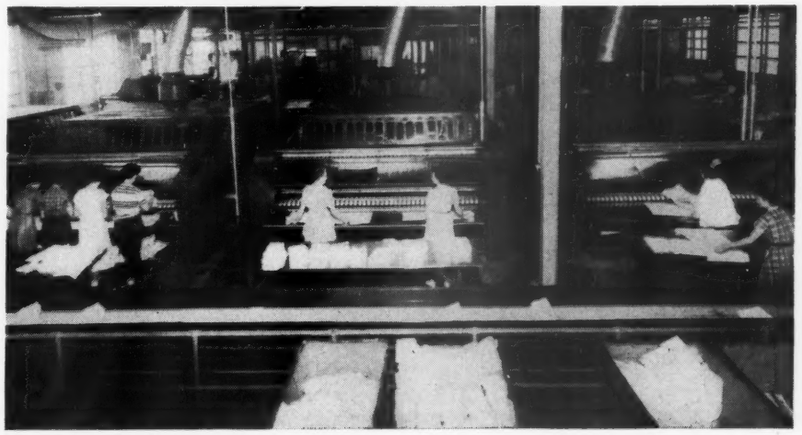
Possible purchase of some diesel-motored cars for service on the road's unelectrified branches, and modernization of some cars now in use on those lines, also deserve consideration, the petition said.

Representatives of the authority and the railroad were scheduled to attend a court hearing on the petition on March 3, although William Wyer, trustee of the Long Island, said the petition asks the court to order him "to do something I'm already doing."

Meanwhile, on February 26 the New York State Senate unanimously confirmed Governor Thomas E. Dewey's appointment of George E. Roosevelt as chairman, and Tracy S. Voorhees as a member, of the authority. Messrs. Roosevelt and Voorhees originally had been given interim appointments. A third member is yet to be appointed, to fill the vacancy caused by resignation of William H. Draper, Jr., former chairman (*Railway Age*, January 21, page 19).

P.R.R. to Quit Broad Street Station on April 27

All passenger train and bus service will be removed from Philadelphia's Broad Street station on April 27; immediately thereafter the Pennsylvania will begin razing the station building and also the "Chinese Wall"—the ele-



TOWELS, NAPKINS, SHEETS—and other linen from the Union Pacific's many trains and resort hotels pass through the railroad's new centralized laundry at Ogden, Utah. Shown here are several of the automatic folding machines which handle towels, sheets, tablecloths and similar articles after they have come off flatwork ironers. These and other laundry machines in the plant were built by the Troy Laundry Machinery division of American Machine & Metals, Inc.

The new laundry, employing 105 workers on a five-day weekly schedule, can handle 110,000 pieces of linen per eight-hour day. Previously, the U.P.'s old laundry handled less than 25,000 pieces per shift and commercial laundries had to take on part of the work. Savings effected by the new plant are expected to exceed $28,000 monthly. Novel feature—hot water and steam are furnished by seven Vapor Heating Company diesel-locomotive-type steam generators.

vated structure carrying railroad tracks between the station and the Schuylkill river.

This announcement was made on February 21 by J. M. Symes, executive vice-president of the Pennsylvania, at a luncheon sponsored by the Citizens' Council on City Planning, the Greater Philadelphia Movement, the Chamber of Commerce and the Greater Philadelphia-South Jersey Council.

Mr. Symes told his audience that this work, when completed — it is the biggest single step in the railroad's Philadelphia terminal improvement project — would make 22 acres of property available for downtown city development. The railroad, he declared, is anxious to get its part of the work done as quickly as possible, and recognizes a definite obligation in the development of this property.

Work on removal of the "Chinese Wall," Mr. Symes said, will begin westwardly from Broad Street station to 17th street, "at about the time we begin tearing down Broad Street station, and later the wall will be removed through to the river. The timing of demolition west of 17th street will conform to plans of the city and state for completing a new bridge over the Schuylkill."

Huge Program

Mr. Symes said the Pennsylvania has already spent about $83 million on its part of this city improvement and "we will be required to spend about $12 million additional before it is completed." He pointed to Pennsylvania station at 30th street, the Broad Street Suburban station and office building, electrification, and the new power plant, freighthouse and other facilities already built as part of the program. He added that the railroad has also spent during the past several years $9½ million in expanding facilities at Pennsylvania (30th Street) station including additional passenger platforms and tracks, escalators, coach yard changes and interlocking plant, track electrification, additional mail handling facilities, a new storehouse at 32nd street and many other things required in a large modern passenger terminal. "The city has likewise been spending many millions of dollars on its subway system that will tie in with our station at 30th street and on other work and property collateral with our activity. The state will spend a large amount in carrying out its part of the program."

Mr. Symes emphasized that the 70-year-old Broad Street station is being replaced by Pennsylvania station at 30th street, "one of the most modern, practical and beautiful passenger terminals in the world." He said that of the 450 odd trains a day that operated in and out of Broad Street station in past years, only 90 remain. These, he said, will be handled at Pennsylvania station — 30th street, or at Broad Street Suburban station, with commuter trains going to the Suburban station and all others operating in and out of Pennsylvania station. The "clockers," Philadelphia-New York trains leaving each city on the hour — will originate and terminate at Pennsylvania station.

Pointing to the steady decline in the use of Broad Street station by Philadelphia-New York passengers and their increased use of 30th Street and North Philadelphia stations, he said that 20 years ago 70 per cent of these passengers got on and off trains at Broad street, while 15 per cent used West Philadelphia and 15 per cent North Philadelphia. Now only 30 per cent use Broad Street station, with 35 per cent using Pennsylvania station and 35 per cent using North Philadelphia.

Mr. Symes emphasized the improved convenience to patrons which will result from centralization of the P.R.R.'s Philadelphia-New York passenger service at Pennsylvania station — 30th street. Philadelphia-New York patrons "will not even need a timetable," so frequent will be the service; "all you will have to do is go to the station, acquire a ticket and get on a train."

Frequent train service is available to Pennsylvania station — 30th street from the Suburban station at 16th street, and eventual connection of Pennsylvania station through convenient passageways and escalators with a city subway station there will provide transportation to all parts of the city. A new Pennsylvania boulevard will take motor traffic right to the station on a wide avenue from City Hall square. The new Pennsylvania-Greyhound bus terminal will be located on the north side of Pennsylvania station, where original plans provided for it.

New Ore Pier

Mr. Symes also called attention to the Pennsylvania's new ore pier at Greenwich, to be ready next year at a cost of $9 million; the new freight terminal at West Morrisville to serve the steel plant and other industry locating in the area, to cost approximately $9 million — also to be completed next year; the 88 modern electric passenger cars placed in the railroad's suburban service recently with 12 more to come by the end of summer, at a cost of over $9 million; and four new sets of equipment for the "Congressional" between Washington, Philadelphia and New York and "Senator" between Washington, Philadelphia and Boston, to cost about $11 million, which will go into service shortly.

"These plans clearly indicate," he concluded, "that the Pennsylvania is vitally interested in future development of [the Philadelphia] area, and is demonstrating its faith and enthusiasm by putting 'cash on the line'."

THE CANADIAN NATIONAL'S old tunnel station in Montreal is being torn down to make room for track extensions at Central Station. Built in 1918 by the Canadian Northern (now C.N.), as a terminal for its Mount Royal tunnel and transcontinental trains, the old station in later years served C.N. Laurentian and commuter trains until Central Station (left, background, in photograph), was opened in 1943. Since then it has housed express offices.

Southern Diner Rules Upheld by the I.C.C.

Making its second report on further hearing in the *Henderson* case, the Interstate Commerce Commission has determined that the Southern's present dining-car rules do not discriminate against the Negro complainant "or others."

The rules involved are those established by the Southern to comply with a June 1950, decision of the United States Supreme Court. In the phase of the case out of which the present commission report came, the complainant, Elmer W. Henderson, assailed those new rules, particularly a provision which reads as follows:

"When entering singly, women will be seated with women, men with men, young people with young people, elderly

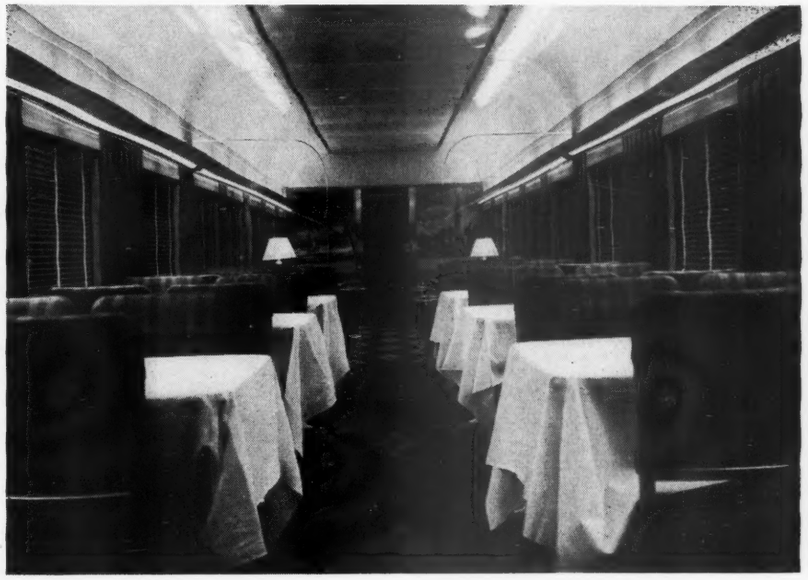
persons with elderly persons, white persons with white persons, and Negroes with Negroes. In following the above illustrations, stewards will bear in mind (occupied space permitting), white passengers should be seated from the buffet or kitchen end of the dining car and Negroes from the opposite end. (From the ends toward the middle)."

The complainant contended that the instructions that white persons be seated with white persons, and Negro passengers with Negro passengers is "but another form of racial allocation of available space which is an undue and unreasonable prejudice and restriction."

After noting that there is "no legal necessity" for reducing diner rules to writing, "so long as the law is observed in practice," the commission went on to say it had not been convinced that, "when fairly and reasonably interpreted and applied," the assailed rules were unduly discriminatory, as alleged.

The report added that the rules "assure substantial equality of treatment to all passengers presenting themselves for dining-car service," and "there has been no showing that, in practice, the rules have been unfairly or unreasonably enforced."

The commission's determination was a 7-to-4 decision. Commissioner Aitchison filed a dissenting expression with which Commissioners Lee, Mahaffie and Cross agreed.



REBUILT AND REDECORATED, the St. Louis-San Francisco's diner-lounge car "Birmingham" presents a pleasing picture of quiet, modern decor. The car has been assigned to the "Kansas City-Florida Special." During the rebuilding, the dining portion was expanded to accommodate 32 passengers at the tables. Formerly, it held only 24. Murals in lounge section depict scenes along route.

Senate Committee Holds St. Lawrence Hearing

The Senate Committee on Foreign Relations last week held further hearings on proposed legislation to approve the United States-Canada agreement for construction of the proposed St. Lawrence seaway and power project.

At the hearing's opening sessions, the project was supported by several senators and government officials, the latter including Chairman John D. Small of the Munitions Board and Secretary of Interior Oscar Chapman.

At the February 27 session, the railroad industry's opposition to the seaway was voiced again by Gregory S. Prince, assistant general counsel of the Association of American Railroads. Mr. Prince's statement was designed in large part to support his contention that Canada's decision to build the seaway independently "is no justification for the United States to join in its construction and waste resources on an unnecessary project."

N.I.T. League Will Meet To Consider Transport Bills

March 21 and the Palmer House, Chicago, have been set as the time and place for the special meeting which the National Industrial Traffic League will hold to consider transport bills introduced in the Senate as an aftermath of studies made pursuant to Senate Resolution 50. This was announced in a February 21 circular issued by Edward F. Lacey, executive secretary of the League.

The announcement said that a meeting of the League's executive committee would be held, also at the Palmer House, on the day preceding the opening of the membership meeting, i.e., on March 20. It also noted that various committees of the League have been studying the bills, and will present recommendations at the meeting.

The principal bills involved are the 19 introduced recently by Senator Johnson, Democrat of Colorado, who is chairman of the Senate committee on interstate and foreign commerce. (*Railway Age* of January 21, page 16.) Mr. Lacey's announcement pointed out, however, that other pending bills and "other subjects of importance" may be discussed at the League meeting.

1951's 3d-Quarter Loading Estimate Was 3.6% High

The 13 Regional Shippers Advisory Boards overestimated car loadings for the third quarter of 1951 by 3.6 per cent, according to the latest comparison of forecasts with actual loadings. Chairman A. H. Gass of the Car Service Division, Association of American Railroads issued the comparison.

It showed overestimates by 11 boards and underestimates by two. By commodity groups there were 21 overestimates and 11 underestimates. The range was from an overestimate of 21 per cent in the case of sugar, syrup and molasses, to an underestimate of 25.2 per cent in the case of hay, straw and alfalfa.

In addition to that on sugar, syrup and molasses, the shipper boards overestimated loadings of vehicle parts by 16.2 per cent; fertilizers (all kinds) by 14 per cent, and metals other than iron and steel by 9.3 per cent.

The range of underestimates by commodities was from 0.02 per cent for frozen foods, fruits and vegetables, to the 25.2 per cent or hay, straw and alfalfa.

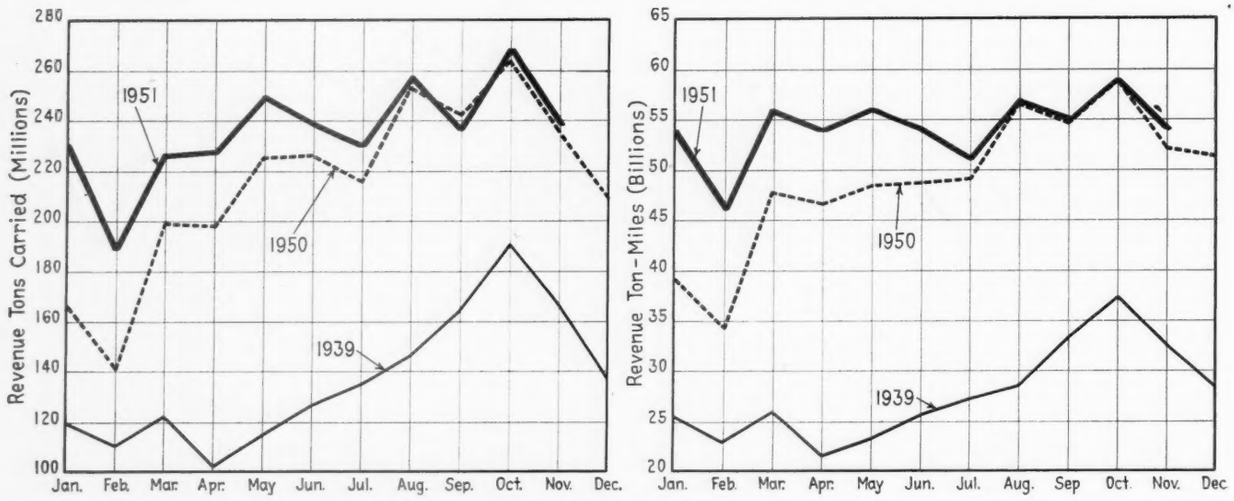
COMPARISON: ESTIMATED NATIONAL FORECAST, REGIONAL SHIPPERS ADVISORY BOARDS, WITH ACTUAL CARLOADINGS, THIRD QUARTER 1951

Board	Carloadings Third Quarter 1951 Estimated	Actual	Percentage of Accuracy Over Est'd.	Under Est'd.
Central Western	298,796	283,302	5.2	
Pacific Coast	421,624	386,112	8.4	
Pacific Northwest	288,662	266,789	7.6	
Great Lakes	725,852	670,240	7.7	
Ohio Valley	960,709	1,017,892		6.0
Mid-West	980,359	934,353	4.7	
Northwest	915,506	874,308	4.5	
Trans-Mo-Kansas	402,865	382,431	5.1	
Southeast	955,543	928,124	2.9	
Southwest	504,704	520,122		3.1
New England	125,441	107,699	14.1	
Atlantic States	864,585	832,291	3.7	
Allegheny	1,045,587	981,170	6.2	
Totals	8,490,233	8,184,833	3.6	

Bills Would Apply Business Principles to Waterways

Bills to direct the Interstate Commerce Commission to prescribe charges for commercial use of inland waterways, and to establish procedures "for the determination of the economic justification of certain inland waterway improvement projects," have been introduced in the Senate.

The bills are S.2743 and S.2744, and their sponsors are Senators Capehart of Indiana and Bricker of Ohio, Republicans, and Senator O'Conor, Democrat of Maryland. The same three senators are also joint sponsors of two other recently introduced bills—S.2742, to provide for liquidation of the government-owned Inland Waterways Corpor-



REVENUE TONS AND REVENUE TON-MILES—1951 compared with 1939 and 1950

ation, operator of the Federal Barge Lines, and S.2745, "to eliminate certain sections of the Interstate Commerce Act which provide for preferential treatment in the matter of rates."

Provisions which the latter would eliminate include the second sentence of section 307(d), which stipulates that, in dealing with joint rail-water rates, the commission "shall prescribe such reasonable differentials as it may find justified" between such rates and all-rail rates.

Egg-Shipping Rules Found O.K. by I.C.C.

The Interstate Commerce Commission has found that no unreasonable or otherwise unlawful practices result from application of railroad tariffs providing special regulations governing descriptions, marks, inspection and delivery of eggs and the handling of claims therefor. The same report, by Commissioner Mitchell, found "not justified" suspended tariffs whereby the railroads proposed to change some of the egg-shipping rules.

The title case was No. 30030, an investigation of the egg-shipping rules which the commission instituted on its own motion in July, 1948. That phase of the proceeding which involved the suspended tariffs was docketed as I. & S. No. 5792, Damage Tolerance on Shell Eggs.

The tariffs in issue apply, or were designed to apply, nationwide.

Freight Car Loadings

Loadings of revenue freight in the week ended February 23, which included the Washington birthday holiday, totaled 683,368 cars, the Association of American Railroads announced on February 28. This was a decrease of 54,241 cars, or 7.4 per cent, compared with the previous week; a decrease of 51,477 cars, or 7 per cent, compared with the corresponding week last year; and an increase of 136,661 cars, or 25 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended February 16 totaled 737,609 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, February 16

District	1952	1951	1950
Eastern	127,112	136,038	107,040
Allegheny	150,843	155,073	110,990
Pocahontas	61,308	58,621	20,643
Southern	137,046	137,568	105,775
Northwestern	78,546	74,975	70,173
Central Western	120,099	119,699	93,391
Southwestern	62,655	58,583	52,056
Total Western Districts	261,300	253,257	215,620
Total All Roads	737,609	740,557	560,068
Commodities:			
Grain and grain products	47,885	48,727	38,209
Livestock	8,118	7,131	7,147
Coal	146,567	149,857	48,831
Coke	16,656	15,857	10,520
Forest products	45,658	46,453	35,521
Ore	19,020	16,940	11,545
Merchandise l.c.l.	77,608	80,265	82,046
Miscellaneous	376,097	375,327	326,249
February 16	737,609	740,557	560,068
February 8	733,724	573,209	568,816
February 2	731,086	651,165	612,464
January 26	727,933	784,166	635,934
January 19	747,662	779,750	619,163
Cumulative total seven weeks	5,030,658	4,974,289	4,131,741

In Canada.—Car loadings for the seven-day period ended February 14 totaled 75,847 cars, compared with 78,064 cars for the previous period according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
February 14, 1952	75,847	38,465
Cumulative totals for Canada:		
February 14, 1952	486,631	232,021

Court Dismisses Suit Against B.&O. Stamp

Judge Bernita S. Matthews of the U. S. District Court in Washington, D.C., last week dismissed a trucking company complaint which sought to enjoin the issuance of a commemorative postage stamp on the 125th anniversary of the Baltimore & Ohio.

The Atlantic Freight Lines filed the suit, asking for a restraining order to keep Postmaster General Donaldson from issuing the stamp. It charged the stamp would provide free advertising and publicity for the B.&O., a competing carrier. To issue the stamp would be unlawful and contrary to national transportation policy, the motor carrier said.

The three-cent stamp commemorates the first railroad charter granted in this country. After the court refused to grant the restraining order, the stamp went on sale February 28.

R.E.A. Allowed to Boost Rates with New Surcharge

A new 6-cent-per-shipment surcharge on Railway Express shipments became effective February 28. The Interstate Commerce Commission voted not to suspend the surcharge, which is designed to offset an escalator wage increase granted R.E.A. employees on January 1.

R.E.A. filed the surcharge tariff late in January, to become effective in 30 days. (*Railway Age*, January 28, page 17).

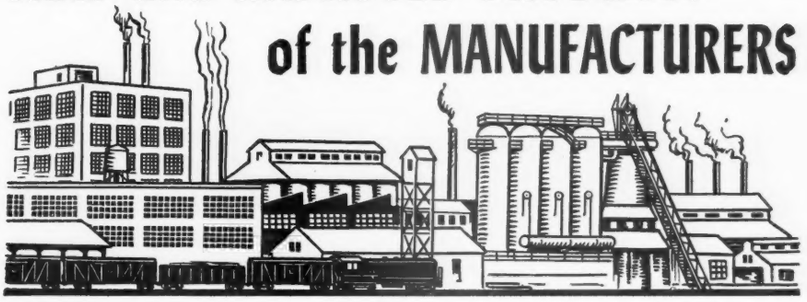
The agency expects the new charges will increase revenues about $3,870,000 a year. The January 1 wage increase will cost about $4,108,000.

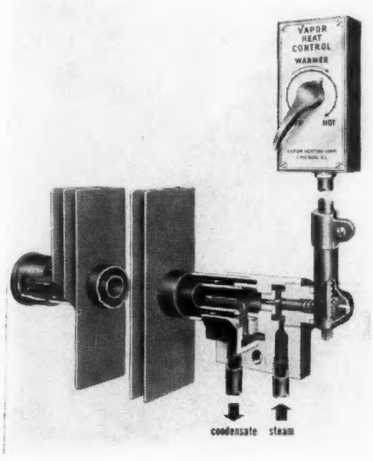
MORE NEWS ON PAGE 76

Additional general news appears on page 76, followed by regular news departments, which begin on the following pages:

Car Service	79
Organizations	79
Supply Trade	79
Equipment and Supplies	81
Financial	81
Railway Officers	84

NEW and IMPROVED PRODUCTS of the MANUFACTURERS





Moduzone steam admission valve and control for use in room cars.

New Vapor Heating Designs

With a view to providing automatic heating equipment of adequate capacity and flexibility for both new and modernized passenger cars, the Vapor Heating Corporation, Chicago, has been concentrating on improvements and refinements in design which simplify the construction, minimize the individual parts required and hence tend to reduce first cost, labor of installation and maintenance in service.

The new Vapor Unizone system for coaches or any open-body car, for example, uses only one thermostat and one steam regulator (two regulators may be used if desired). Steam is supplied automatically through the regulator to the floor and overhead radiation and the wash-water heat exchanger. Only nine compact units of five standard Vapor parts are required for accurate temperature control when one regulator is used with this system, the parts weighing less than 60 lb. per car set. The accompanying sketch shows the general arrangement of Unizone heating equipment and how underneath piping is simplified and minimized. Car heating pipes are insulated with the trainline for increased efficiency.

For sleeping room cars, the Vapor Moduzone system has been reduced to two master thermostats, two skin thermostats, three steam regulators, and a steam admission valve in each room with remote control so each passenger may keep the rooms as warm as desired.

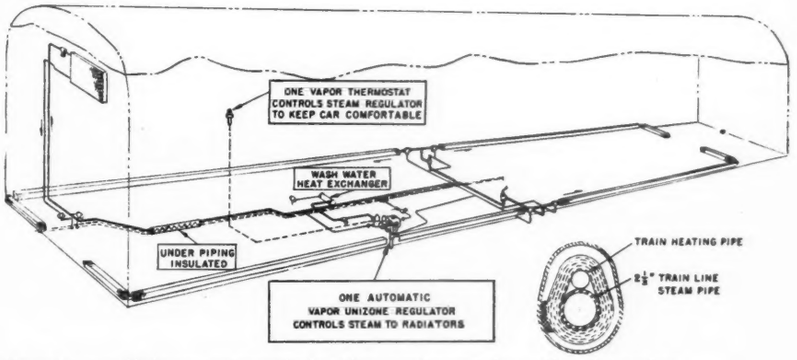
A new Moduzone steam admission valve is installed on the unit-fin radiator in each sleeping room. By turning the remote control selector, connected by cable to the valve, the passenger adjusts the valve orifice to admit more or less steam as needed. Steam is directed into the inner tube of the unit-fin radiation where it gives off heat to condensate in the outer space. This condensate, in turn, heats the unit-fin radiators and, when relatively cool, is released to the ground.

Warm air is also circulated into each room through overhead louvers which may be adjusted by the passengers.

The new Vapor Aquazone heating system uses liquid as a heating medium, circulated by an electric pump through the floor and overhead heating radiators. The liquid may be water or a non-freezing solution. It is heated by train-line steam fed into a heat exchanger by a standard Vapor steam regulator; by waste heat from diesel engines in the cars; or by a small automatic Vapor heater, fired by oil or propane fuel. These liquid systems are also controlled by thermostats to keep the cars comfortable.

Liquid heating systems are well adapted for use on certain types of cars such as some electrified trains or on business cars which need an independent system to heat the cars when no steam is available.

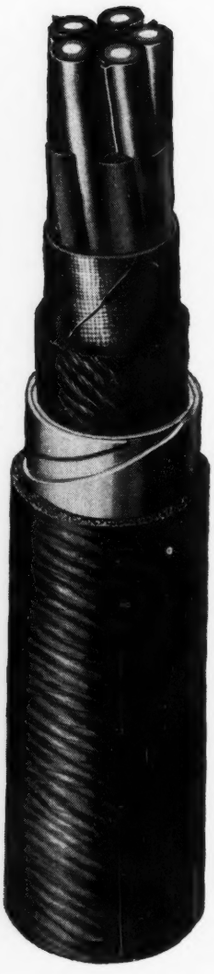
Flextite, a liquid chemical additive which, the manufacturer guarantees, makes a fast-acting leak-stopper out of ordinary cement or cement and sand, has just been made available by the Building Maintenance Division of the Flexrock Company, Philadelphia 4. Flextite is said to work equally well on concrete, masonry or brick surfaces. It is reported to regulate the setting time of Portland cement from 30 seconds to 30 hours, making it possible to stop direct leaks without removing hydrostatic pressure.


ONE VAPOR THERMOSTAT CONTROLS STEAM REGULATOR TO KEEP CAR COMFORTABLE
WASH WATER HEAT EXCHANGER
UNDER PIPING INSULATED
ONE AUTOMATIC VAPOR UNIZONE REGULATOR CONTROLS STEAM TO RADIATORS
TRAIN HEATING PIPE
2½" TRAIN LINE STEAM PIPE

Vapor's new Unizone automatic heating equipment for railroad coaches.

for added reliability in modern classification yards-

OKONITE-OKOPRENE CABLES



Multi-conductor Okonite-Okoprene non-leaded steel-armored parkway cable (also available with Okoprene outer sheath instead of metallic armor).

Single conductor heavy-duty Okonite-Okoprene track wire.

Modern, electrified classification yards are the newest means for cutting down freight transit time. But dependable, integrated performance on classification yard track layouts requires the utmost reliability in the electrical cable used. That's why Okonite-Okoprene cables are the choice of many of America's leading railroads.

The heavy emphasis on time saving is one reason why Okonite-Okoprene track wire and parkway cable are being so widely specified. For Okonite-Okoprene—used above or underground—is the most reliable railroad cable ever developed. The likelihood of circuit failures, with consequent interruptions in service, reaches a minimum with Okonite-Okoprene.

Maintenance costs fall off, too, when control and operation circuits are handled by Okonite-Okoprene. That's because these cables are exceptionally strong, both electrically and physically. Okonite Insulation possesses an electrical stability which can be achieved only by the use of high quality rubber. The Okoprene Sheath resists moisture, heat and weather, as well as the oils, acids and chemicals common to soil in railroad yards.

For full details on how Okonite-Okoprene keeps retarders, switch machines, track circuits and signals in apple pie order, ask your Okonite representative. Or write today to The Okonite Company, Passaic, N. J.

THE BEST CABLE IS YOUR BEST POLICY

OKONITE SINCE 1878 *insulated wires and cables*

9478

RAILWAY AGE
EDITORIAL COMMENT

WHOSE JOB IS IT TO PREVENT RAILROAD STARVATION?

Whose fault is it that the railroads are not regulated, as the law directs, so as to preserve for the public the "inherent advantages" of railroad transportation; "sound economic conditions"; and the development of transportation facilities "adequate . . . to the demands of commerce . . . and the national defense"?

The Constitution vests all power over interstate commerce in Congress; and in the "declaration of policy" contained in the Interstate Commerce Act, Congress has prescribed that regulation be "fair and impartial" and so administered as to foster and preserve an economically sound transportation system. Congress issues the orders, but the duty of carrying out the orders devolves upon the Interstate Commerce Commission.

What kind of "sound economic condition in transportation" do we have when, in such a year of heavy traffic as 1951, the indispensable railroads are so regulated that they were able to earn only 3.7 per cent on their net investment, less depreciation? In the five preceding years 1946-50, rate regulation by the Interstate Commerce Commission held the railroads down to a return of 3.5 per cent on their net investment—six long years of heavy traffic but penurious earnings! No other major industry is expected to subsist on such a pitiful return. The state commissions which regulate the electric utilities permit them to charge rates which give them earnings at practically twice the level being allowed to the railroads by the I.C.C. The manufacturing industry, on the average, has been earning three times as much for its investors as the railroads.

What Difference Does It Make?

What difference does it make to the public whether the railroads earn any money or not? Simply this—that the public needs railroad service and the railroads need a constant inflow of new investment capital, just to stay in business. This necessity arises in this way: As old plant and equipment is used up, only the *original cost* can be charged, through depreciation, to operating expenses. Thus, if a building which originally cost $100,000 deteriorates to the point where it must be replaced by a new building of the same size, but which costs $200,000 at today's higher prices, only the original cost of $100,000 is available from depreciation charges to finance the replacement, and the railroad has to go out and find another $100,000 of new investment money if the worn-out building is to be replaced. Of course, if a larger or better building than the old one is needed, then even more new investment money must be found.

If the railroads can't get more money than is now coming their way—either directly from net earnings or from investors—then they are condemned to a steady shrinkage in their plant and facilities. What kind of "fair and impartial regulation" is that? How sound are the economic conditions in transportation that Congress has directed the Interstate Commerce Commission to foster?

The fact is that the "declaration of policy" in the Interstate Commerce Act—beyond reproach in principle—is nothing but an expression of pious platitudes, *in the absence of specific instructions in the law prescribing how the commission must go about doing as it is told.* Actual experience with regulation over many years has clearly shown that, if given a specific directive to carry out, the commission will make at least some effort to obey—but, if the directive has loopholes in it, the regulators will invariably wriggle through them. Let's look at the record:

Many years before Congress gave the commission authority to regulate railway rates, the Supreme Court had held that such regulation must permit the railways to earn a fair return on a fair valuation. Nevertheless, once the Interstate Commerce Commission got control over rates, and up until World War I, it persistently refused—or at least failed—to regulate railway rates so as to provide this "fair return." The result was that, mainly because of "car shortages" (a sure symptom of bumbling regulation), the railways were forced in 1918 into government operation.

When wartime government operation proved a complete fiasco, Congress returned the railways to private

operation under legislation which not only ordered the commission to fix rates that would produce a "fair return," but specified exactly what Congress believed would constitute such a return. The main provisions of this legislation appeared in Section 15-A of the Transportation Act of 1920 and were that "the commission shall . . . adjust rates so that carriers . . . will under honest, efficient and economical management . . . earn an aggregate net railway operating income equal . . . to a fair return upon the aggregate value of the railway property of such carriers." Congress went further and set 5½ per cent as the minimum rate of return for two years after government operation ended.

This expression of the will of Congress was sufficiently insistent and unequivocal that the commission regulated rates so that the railways earned an average of $1,017 million yearly, or about 4.6 per cent on their net investment, in the decade 1921-30, inclusive. This wasn't generous enough, but it was a lot more than the commission has permitted the railroads to earn in the past six years.

Dependable "Living Wage" Needed

This paper favored Section 15-A in 1919 and opposed its repeal in 1940 on the ground that all experience with the commission has shown that, unless specifically required by Congress to do so, it would never so regulate rates as to afford the railways opportunity to earn, on the average, something approaching the "fair return" to which the Supreme Court had held they were constitutionally entitled. Our misgivings about the danger of repealing Section 15-A have been fully justified by what has happened since. The commission just can't be depended upon to let the railroads earn a "living wage" for investment money, unless Congress lays down this obligation in words so direct that no loophole for evasion can be found.

Two bills have been introduced in Congress, S.2518 and S.2519—the first of which would make it permissible for the railroads, on their "certification" that they have incurred increased costs, to make proportionate increases in their charges in order to "maintain sound credit" and "attract equity capital"—such increases being subject to investigation by the commission but not to prior suspension. The second bill would change the present rate-making rule—which enables the commission to prohibit or restrict rate increases if it guesses such increases would diminish traffic—and puts the emphasis, instead, on a requirement that rates be sufficient to yield earnings attractive to new investment capital and to enable the railroads to make improvements in their plant and service.

This paper reserves judgment as to whether these two particular bills are, as yet, in precisely the form best calculated to meet the need. As to the soundness in principle of these proposals, however, there can be no dissent except by those who want to see the railroads socialized.

FREIGHT CAR REPAIR COSTS

An unusual analysis of freight car maintenance costs per car per year, covering a five-year period and taken from repair records based on Association of American Railroads' prices, was made some years ago. It continues to be of interest today because essential principles remain the same, even if labor and material prices are much higher.

The first and most significant fact disclosed was the penalty which railroads pay for continuing older equipment in service. Repair records were studied for a substantial number of box cars 20 years old, as compared with cars of the same capacity and type only 10 years old. The latter cost a little more than one-half as much to repair per car per year as did the former.

Considering the repair cost per car per year of the older box cars as 100 per cent, the four largest individual items in this expense were: flooring, 22.05 per cent; lining, 13.8 per cent; roof renewed, 10.1 per cent; wheels, 9.4 per cent. In the 10-year old cars, the cost emphasis differed, although flooring was again the largest single item (25.6 per cent), which explains why so many roads now find it profitable to install improved steel and composite wood-steel floors at increased price, because they give much better service and shipper satisfaction than wood decking and require much less maintenance expense.

Car lining held up well in the 10-year-old box cars, so the second largest item of repairs was wheels, 21.2 per cent; followed by car inspection, 12.0 per cent; and air-brake cleaning, 6.8 per cent. It was noted that car flooring, wheel repairs, air-brake cleaning and car inspection each accounted for a larger proportion of total repairs for the 10-year-old cars than for those which had been in service twice as long. The explanation apparently is that these particular items of repair cost are more or less fixed regardless of car age and consequently form a larger proportion of the total when overall costs are low, as in the case of the 10-year-old cars.

The average annual cost per car of repairs for all cars included in the study was then about $85. Figures available for one large railway system show how increases in labor and material prices have more than doubled this cost in a decade and reached a maximum of over $210 per car per year within the last three years. This indicates how much greater is the penalty now paid by the railroads for keeping in service old cars which have reached an age and general condition which justify their retirement.

The proportion of scrap needed to produce a ton of new steel amounts to about 30 per cent. Each old car retired, therefore, provides scrap for enough steel to produce well toward three new cars. Considering the present desperate scrap shortage, this is a factor weighing heavily in favor of allocation of sufficient steel for new freight cars so that the railroads will not be forced to curtail retirements in order to maintain or increase current freight-car inventories.

The steamer "Wabash"—flagship of the Ann Arbor car ferry fleet—preparing to back into the Frankfort slip.

Rails Across Lake Michigan

Ann Arbor Service—And What It Offers Shippers

Primarily a bridge carrier, the Ann Arbor is an essential link in the short all-rail route between Eastern Trunk Line, New England and Central Freight territories on the one hand, and Wisconsin, Minnesota and the Northwest Pacific Coast territories on the other. The road provides no passenger service and therefore its staff can devote all its attention and energy to the everyday but very essential tasks of moving freight expeditiously and of providing dependable service the year around.

The Ann Arbor is an unusual railroad in that more than half— 320 out of 612—of its route miles are over water, with service performed by car ferry steamers which carry the loaded freight cars on tracks in their hold.

Yet, in spite of the predominance of its marine operations, it is every inch a railroad, operated to railroad standards. The "railroad" status of the car ferry operations was confirmed at an early date by the Interstate Commerce Commission, which ruled that they constitute the extension of a railroad service, performed by the line owning them.

Because of its function as an important bridge carrier, primarily concerned with the operation of good service between the connections at the southern end of its line and those at west-bank Lake Michigan ports, shippers to and from the Northwest and Pacific Coast territory look upon it as a railroad prepared to respond quickly to all their traffic needs. The car ferry routes make the short line distances between large portions of the Northwest and Eastern territories and thus are an important factor in freight rate making—and in the economic life of the territory served.

Works With All Roads

In its operation as a link between the East and the West, the Ann Arbor cooperates and works in close harmony with all the railroads of the nation. Direct connections are made with 18 railroads, and schedules are coordinated with those roads to provide through continuous service. The direct road-to-road interchange between the Ann Arbor and its connections avoids delays often encountered in large terminals.

Across-lake traffic is of greatest importance, with more than 65 per cent of the freight the road receives being handled on the car ferries. Second in importance

Cars are securely braced and anchored inside the ferries by means of anchor-jacks and track-chocks.

The car ferries are equipped with every navigational aid—including radar, radio-direction finders, and telephones.

FT-2 leaving Frankfort after receiving cars from Kewaunee, Manitowoc and Menominee.

is the substantial amount of traffic moving between industrial centers in southern Michigan and connections in lower Michigan and at Toledo.

Changeover from steam to diesel-electric locomotives in all road service was accomplished in December 1950. In the same month enough additional diesel-electric switchers were delivered to complete the dieselization of yard service, which had been approximately 75 per cent diesel-operated since 1945.

The effects of this changeover are apparent in the records of freight train operating performance for 1951. The average tonnage per train increased by 15 per cent, and the average train-miles per train-hour increased by about 8 per cent over 1950. The Ann Arbor is moving more cars, faster.

Completely new diesel servicing and repair facilities costing approximately $500,000 have been built at Owosso, equipped for both light and heavy repairs. Secondary facilities have been provided at Toledo and Frankfort to service road and yard power and handle light repairs.

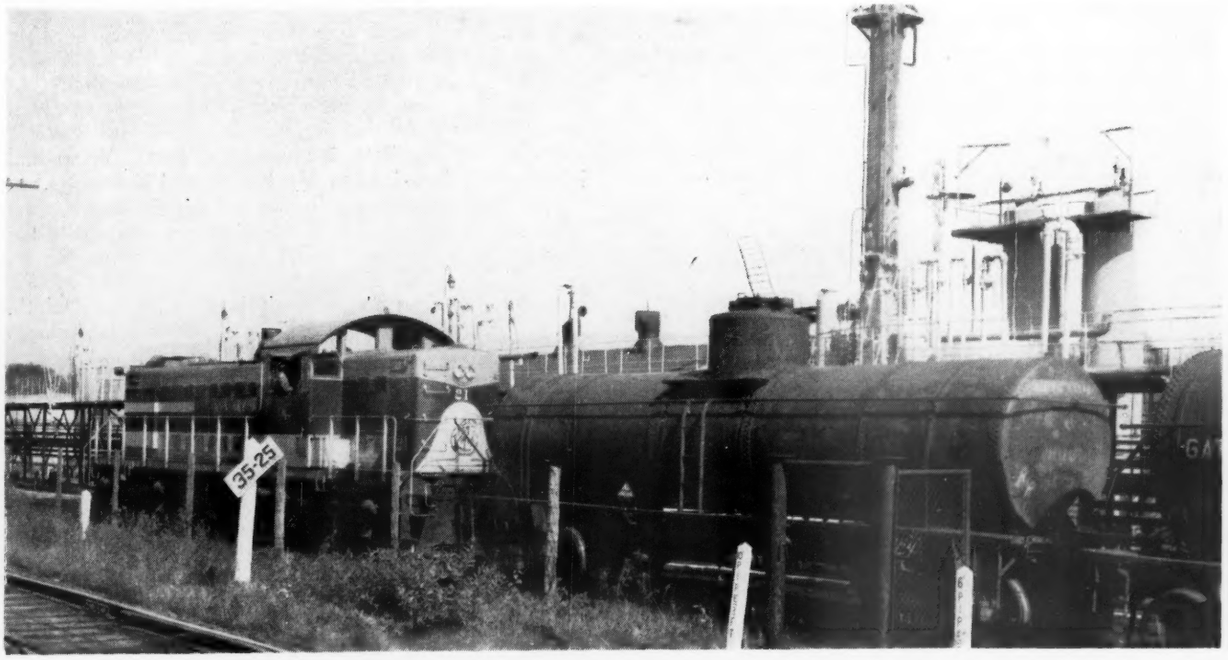
An interesting feature of the new Owosso servicing center is the use which has been made of a 160-ft. portion of the company's car repair shop building. In this building a two-track servicing center has been provided with two 120-ft. pits to accommodate the two-unit road engines, and with high-level platforms adjacent to the tracks, with special lighting, tools and equipment, to facilitate inspection, servicing and repair. Auxiliary services are provided along one side of this servicing center with a two-level arrangement and space for stores, toolroom, filter cleaning, testing, etc.

An adjacent "high-bay" annex has been constructed, 140 feet long, which also contains two tracks, a modern drop pit, 25-ton overhead crane, 5-ton auxiliary crane, and all necessary facilities for heavy repairs. Tools and equipment especially designed for diesel maintenance and repair have been provided, giving the road thoroughly modern facilities for diesel-electric locomotive inspection, servicing and maintenance.

Marine Operations

Marine operations might be termed the "lifeline" of the Ann Arbor, for without the services of its fleet of five steel car ferries the railroad would soon wither.

Within minutes after the boat is securely moored, the boat-yard switcher commences removing cars.



The Ann Arbor is endeavoring to locate industries on its line. Here the daily local is switching at a large oil refinery at Mt. Pleasant, Mich.

These ships ply Lake Michigan the year around on fixed schedules timed to fit the manifest freight train schedules of their western railroad connections. This means, in effect, that Ann Arbor freight train schedules originate (southbound) and terminate (northbound) at "west bank" ports.

The car ferries carry up to 30 freight cars, each, on four tracks, and are loaded and unloaded from the stern over a hinged apron. Once on the vessel, cars are held in place by specially designed gear. First, heavy chocks are clamped to the rails ahead of wheels to prevent movement on the tracks. In addition, screw jacks are placed at the four corners of each car, between the car body and a dead rail fastened to the car decks, to prevent rocking of cars at sea. This is to safeguard the vessel as well as its cargo of freight cars and their valuable contents. The movement

of cars on to and off the vessels is a precision job, requiring judgement and care on the part of the switchmen and enginemen, and is accomplished with remarkable gentleness.

At Frankfort, headquarters of the Ann Arbor's Marine department which dispatches the car ferries, the ships generally move on a "first in—first out" basis, with such variations as are necessitated by the traffic needs of the moment.

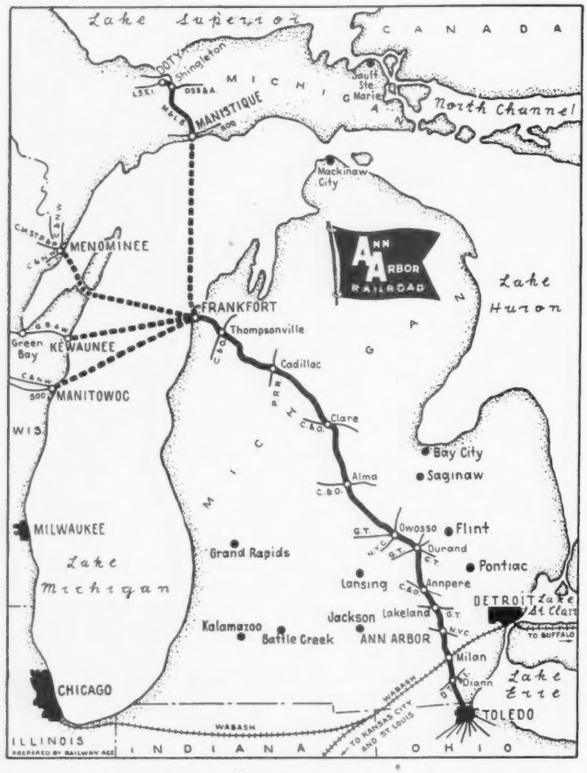
Advance consists of trains are received at the boat yards where trains are broken up and cars classified for car ferry movement. Switching cars for ship cargoes is complicated. Cars must not only be classified as to route, but must also be "arranged" with consideration to gross weight, so that when a vessel's cargo is "shoved aboard" it will split up on the four boat tracks with a proper weight distribution—keeping the vessel in "trim" (i.e., on an even keel.

Otherwise much time would be lost in shifting cars from one track to another on the vessel to equalize the weight and overcome list in the ship.

Fast Dock Work

In practice the boat yards work fast. They must, because ship time is very expensive, and schedules must be maintained. Manifest schedules allow only one hour between arrival of train and departure of ship. East-bound cars taken off the ships likewise must be handled with promptness and often are on their way in outbound trains in an hour, or a little more, after arrival of the ship.

The operating record of the car ferries is almost legendary in the Lake Michigan area. Although storms occasionally disrupt regular schedules, there are relatively few days on which no boat movements are made. The Ann Arbor takes pride in having inaugurated car ferry service on Lake Michigan in November 1892, between Frankfort and Kewaunee. Since that time it has maintained continuous service—and has extended its routes to include Manitowoc, Wis., Menominee, Mich., and Manistique.



The Ann Arbor owns the Manistique & Lake Superior, a short line which connects the northern ferry route at Manistique with the Lake Superior & Ishpeming, and the Duluth, South Shore & Atlantic.

Integrated Schedules

Integrated car ferry and train schedules are arranged to provide through manifest freight service between the Ann Arbor's trunk line connections on the west bank of Lake Michigan and all eastern connections at Toledo and intermediate junctions. Connections are made at Milan with through Wabash "redball" schedules east and west.

An example is symbol train FT-2, the Ann Arbor's fast eastward schedule, which handles perishable and other high class freight such as cheese, milk and other dairy products, meat and paper, from Wisconsin's rich Fox River valley. Cars loaded in this area come to the Ann Arbor car ferries via the Chicago & North Western and Soo Line at Manitowoc, and via the Green Bay & Western route at Kewaunee, Wis. Ferry schedules call for 10 p.m. departure from those west bank ports, with train arirval in Toledo at 4:30 p.m. the next afternoon, where connections are made with evening departures of eastern lines. Westbound, TF-5 is scheduled to leave Toledo 9 p.m. with arrivals via car ferry at Kewaunee at 3 p.m. and Manitowoc at 6 p.m. the next afternoon, making connection with scheduled trains of the western lines.

There is also regular morning scheduled symbol boat-train service from Manitowoc and Kewaunee eastward through to Toledo and intermediate junctions, as well as in the reverse direction westward from Toledo and intermediate junctions to Manitowoc and Kewaunee.

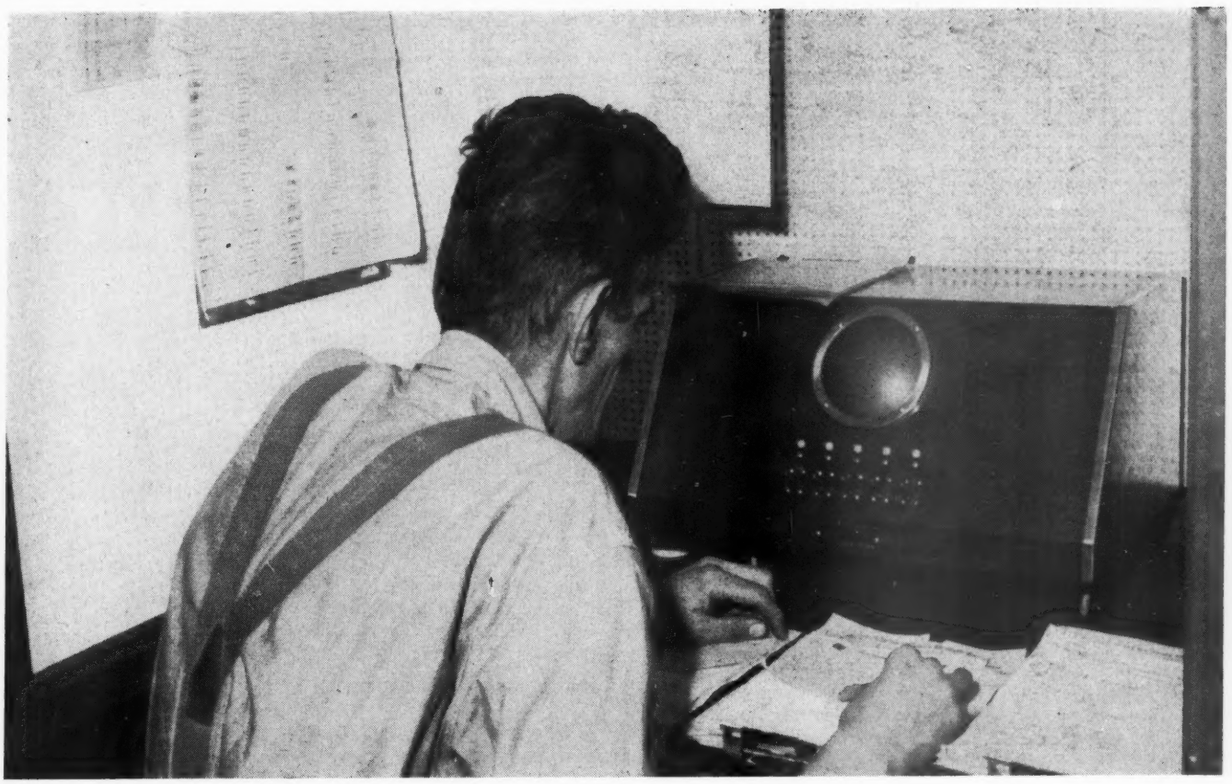
Similarly, there are regular ferry schedules to and from Menominee, Mich., where connections are made with the C. & N. W. and the Milwaukee, and Manistique, Mich., connecting with the Soo and, via the Manistique & Lake Superior (an Ann Arbor subsidiary) with the Duluth, South Shore & Atlantic and Lake Superior & Ishpeming.

Extra Trains

The Ann Arbor has three through daily manifest "symbol" schedules in effect, which provide adequate coverage for expeditious movement of freight. In addition it operates extra trains to meet traffic requirements, and regular local service taking care of the needs of the on-line communities it serves.

Manitowoc, Wis., and Kewaunee and Menominee, Mich., and Manistique—the Ann Arbor's ports on the west shore of Lake Michigan—are on the so-called 100 per cent basis of rates (the same as Chicago), to and from Official territory. The Ann Arbor, as an eastern line serving this territory, is in a position to maintain this favorable freight rate situation and thereby aid in the industrial development of the territory adjacent to and beyond these ports.

Although the Ann Arbor has been a wholly owned subsidiary of the Wabash since 1925, it is operated as a separate entity and maintains an independent solicitation and rate-making organization. In this way the Ann Arbor can take full economic advantage of being a part of the Wabash system, but is able to operate on its own in the solicitation of traffic, in rate matters and in making traffic agreements with connecting lines—in other words, to act as a free agent in offering shippers in its territory the attention and service they need.



The console on each checker's desk enables him to work with callers in three or four cars.

How Two-Way Talk-Back Speakers Save Time in Milwaukee L. C. L. Transfer

Each of the "checkers" in the office can now work with "callers" in as many as four cars; "paper work" has been improved and movement of freight has been expedited

A complete system of modern communications equipment is an important aid in expediting operations of a large l.c.l. freight transfer in the Milwaukee's Galewood Yards in Chicago.

Years ago a system of telephones was installed at this freighthouse consisting of 30 phones placed on desks in the office and in weatherproof boxes on posts on the platforms. These phones are connected to one circuit, like a rural party line. A paging system, installed two years ago, includes 40 loudspeakers spaced about every 100 ft. on the platforms, with the controls and microphones on two desks in the office.

The recently completed (1951) project includes 30 office control consoles and 90 portable two-way talk-back loudspeakers for communication between "checkers" in the office and "callers" working in cars or trailers to unload the freight. The following description applies primarily to this new talk-back system.

The freighthouse consists primarily of two main platforms, one 28 ft. and one 40 to 60 ft. wide; both are 1,810 ft. long. These platforms are connected at one end by movable bridges and on the other end by a lift bridge. Trackage is provided to spot 159 inbound cars to be unloaded and 160 to be loaded, outbound. Tracks No. 3, 4, 8 and 9 are adjacent to the platforms. Cars on the other tracks are spotted with doors in line with the doors of cars adjacent to the platforms. Operations include transfer between highway trucks and railroad cars,

Loudspeaker, hanging on a nail inside car door, picks up voice of caller working anywhere inside.

and between cars. The truck platform is west of the office, south of the main platforms. The platform trucks are pulled along the platforms by a continuous overhead conveyor (*Railway Age*, June 17, 1950, page 52). All freight is marked, at the time of unloading, with a "spot" number of the outbound car.

How the Crews Operate

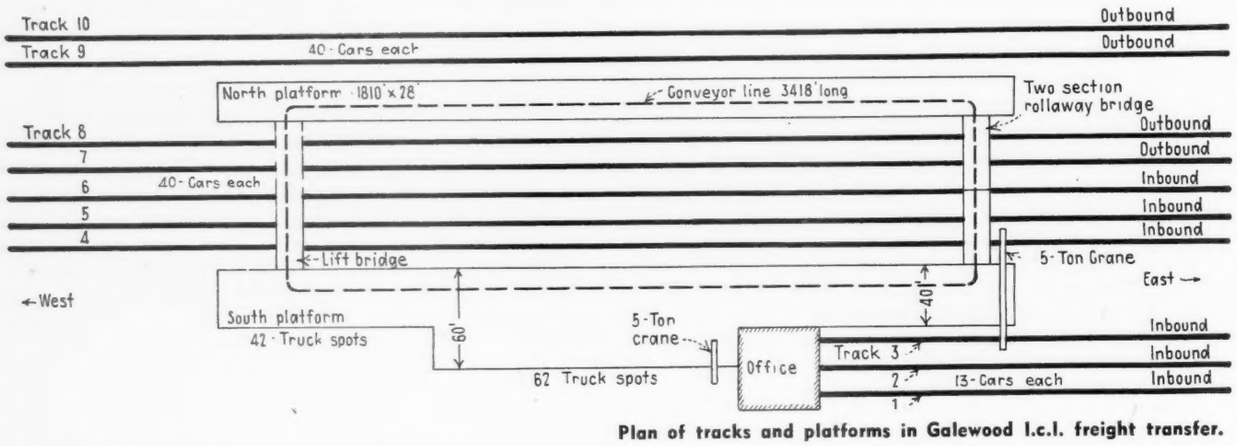
A crew is assigned to unload each freight car. Prior to the introduction of the loudspeaker system, each crew included a "checker" and a "caller." The checker took the waybills with him to the car. As the caller brought forward each package, he would call out the name of the consignee and the destination. The checker would call out a number which the caller would chalk on the package—the number being the "spot" assigned to the car loading out for that destination.

Handling waybills on open platforms and in open cars, especially on cold windy days, was difficult, and the circumstances were adverse to good paper work. Another factor was that unloading a car usually was a slow process, so that the checker ordinarily spent much of his time waiting for the crew to load the packages on the trucks and pull them out. When the unloading of a car was finished, the checker would make a trip to the office to turn in the papers and get more for some other car to be unloaded. This required more time.

Checkers Now Stay in Office

With the newly installed communication system, the checkers are now working at desks in the office, and, by means of the two-way talk-back speaker system, a checker in the office and a caller in a car can talk back and forth to each other, just as if the checker were standing in the car. Each checker has his bills and lists in orderly piles on his desk, and he can readily work with callers in as many as four cars, whereas before each checker could handle only one car. The use of two-way talk-back speakers, instead of telephone handsets or head sets, permits both the checkers and the callers to be free to use their hands and to permit the caller to carry on a conversation from any spot he is working in the car, without going to a phone.

In the new system no trips are required between the office and the cars to carry waybills. When a crew finishes the unloading of one car, the checker is ready to direct them to take their portable speaker and go to another car for which he has the bills for unloading. In numerous



Plan of tracks and platforms in Galewood l.c.l. freight transfer.

Chain conveyor pulls hand trucks along freighthouse platform.

ways, it can be seen, the new talk-back speaker system has improved efficiency and expedited operations.

In the office, each checker has a console on his desk (see illustration). This console is equipped with keys, relays and indicator lamps for five intercommunication lines, an amplifier, a speaker, controls (for adjusting the volume level of the speaker in the console and at the car), and the necessary plugs for connecting the console to the various intercommunication lines, the a. c. power source, and the foot switch. To check the activity in any particular car, the checker merely pulls down the key associated with the car in question and listens. When he wishes to talk to the crew in any car, he pulls down the key associated with the car, steps on the foot switch, and talks. From each checker's console, five circuits extend to five jacks in a board in the east wall of the office. From other jacks in this board, a circuit extends to each of the 160 outlet receptacles on posts along the entire platforms.

When starting work, each checker is issued the bills for freight in certain cars. He then goes to the board and with plug cords connects the jacks from his console circuits to the jacks for the outlets on posts nearest the cars which he is to "work."

"Checkers" Are in Booths

Each checker's desk is in a booth. The wall in front of the checker and the walls on each side, to a height of about 3 ft., are covered with sound absorbing Celotex tile. The ceiling of the room as a whole is also covered with this acoustical material. As a result, the conversations being conducted by the checkers do not interfere with the work of other checkers in the same office. A total of 30 checkers' consoles and desks were included in this project. Not all of these are in service at one time.

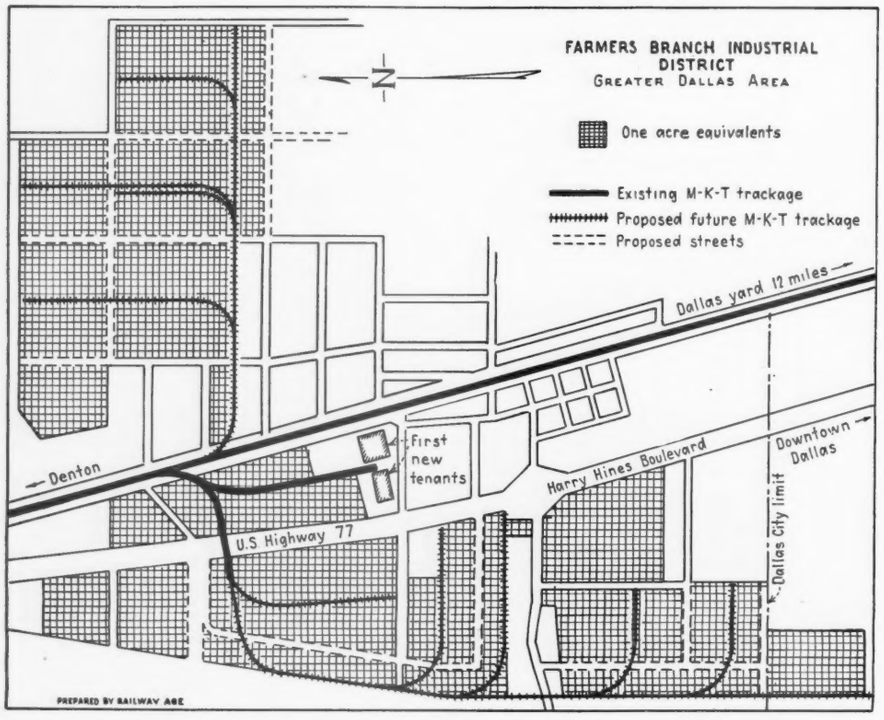
When starting work in the morning, each caller goes to a window at the office where he is issued a portable talk-back speaker unit, and receives directions from his checker concerning the location of the car which this caller and his crew are to unload. Each portable speaker is mounted on a plyboard ¾ in. thick, 4 in. wide and 30 in. long. A weatherproof pushbutton also is mounted on this board. There is a ½-in. hole through the board near one end so that the speaker, as a whole, can be hung on a nail to be driven in the wall of a car near the door. Extension cords, 25 ft. to 75 ft. long, with a plug on one end and receptacle on the other are issued to each caller with his talk-back-speaker unit.

When the caller gets his talk-back speaker connected and hung on a nail in his car, he pushes the pushbutton on the set. This "signals" his checker by lighting one of the small indicating lamps on the panel on the checker's console. To answer, the checker throws the key associated with the lighted lamp, steps on his foot switch, and talks into the console speaker. Then he releases the foot switch to allow the incoming statement of the caller to be reproduced in the speaker in the checker's console.

This talk-back speaker communications system was planned and installed by railroad forces of the Milwaukee under the jurisdiction of L. B. Porter, superintendent telegraph and signals, and under the direction of E. J. Muckerheide, communications engineer; with W. R. Jensen, supervisor telegraph and signals, in charge of construction and maintenance forces. The talk-back speakers, control consoles and amplifiers were designed and manufactured by the Electronic Communication Equipment Company, J. L. Bowen, president, Chicago.

The Airlawn Industrial District of Dallas—model for the new Farmers Branch development.

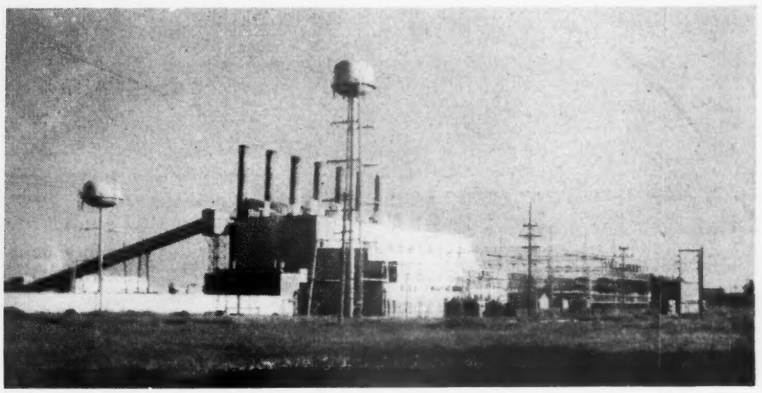
Industrial Development on the M.-K.-T.



The recent opening of the Farmers Branch Industrial District in Dallas, Tex., has highlighted the Missouri-Kansas-Texas' aggressive program for attracting new industries to locate on its lines. This is the sixth industrial district the road has opened in Dallas in as many years. The opening of this 350-acre site followed complete occupation of the modern 256-acre Airlawn (Dallas) Industrial District, opened in 1946.

For the past seven years the Katy has sponsored a program of industrial development designed to attract

GOOD RAIL SERVICE—an essential ingredient for successful industrial development—is supplied by the M.-K.-T. Here the "Katy Komet"—fast merchandise train—is passing a local at the entrance to the Denton, Tex., yard.



CHOTEAU POWER PLANT, source of process steam and stand-by power for the Grand River Dam Authority's industrial development project near Pryor, Okla.

new industries and traffic and to provide, insofar as possible, greater industrial diversification. Although it has been aided in this effort somewhat by the rapid economic growth of the Southwest, nothing has been left undone which would capitalize on this opportunity.

A somewhat unusual feature of this industrial development program is the Katy's preference for working with local interests rather than attempting to achieve outright ownership for itself. With local capital and interest behind each project, new tenants are assured of better cooperation from local authorities. For its part, the Katy seeks exclusive service contracts. In turn, its industrial research and development department is able to contribute transportation and resources "know-how" garnered from its wealth of transportation experience.

The Farmers Branch Industrial District—one of the largest restricted districts in the Southwest—is being developed on land owned by a Dallas business man, and will be served exclusively by the M.-K.-T. The restrictions provide for broad, expansive streets, masonry construction, and uniform setbacks from the street with rail and truck entrances from the side or rear.

The district is served by a 66-in. pipeline supplying filtered water at 100-lb. pressure from Dallas' new million dollar water plant which is within two miles of the site. Plentiful supplies of natural gas and electric power are available. The Farmers Branch community has completed a new municipal sewage plant adequate to provide necessary disposal facilities. Plans are under way for the establishment of a 30-acre shopping center close to the district.

The advantages of local ownership are evident in the large amount of advance preparation which was completed before the site was formally opened. Not only is the site favorably situated on a four-lane express highway from downtown Dallas, but it is completely equipped with all the basic necessities for industry. It is astride the Katy's main line between Denton and Dallas with switching service by a daily engine working out of Dallas yard, 12 miles distant.

To the north, near Pryor, Okla., the Katy is a participant in another large industrial development project—the Choteau project of the state of Oklahoma's Grand River Dam Authority. The M.-K.-T. has exclusive rights to provide all rail transportation in this new development project.

The dam authority project is the site of a former ordinance works, and boasts facilities of interest to a wide variety of industries. The authority is offering an unusual "package deal" to interested concerns, with all utilities immediately available. This "package deal" includes:

(a) large quantities of hydroelectric power "firmed up" by steam;

(b) unlimited quantities of raw or treated water;

(c) large amounts of process steam, priced near the cost of production;

(d) fire protection;

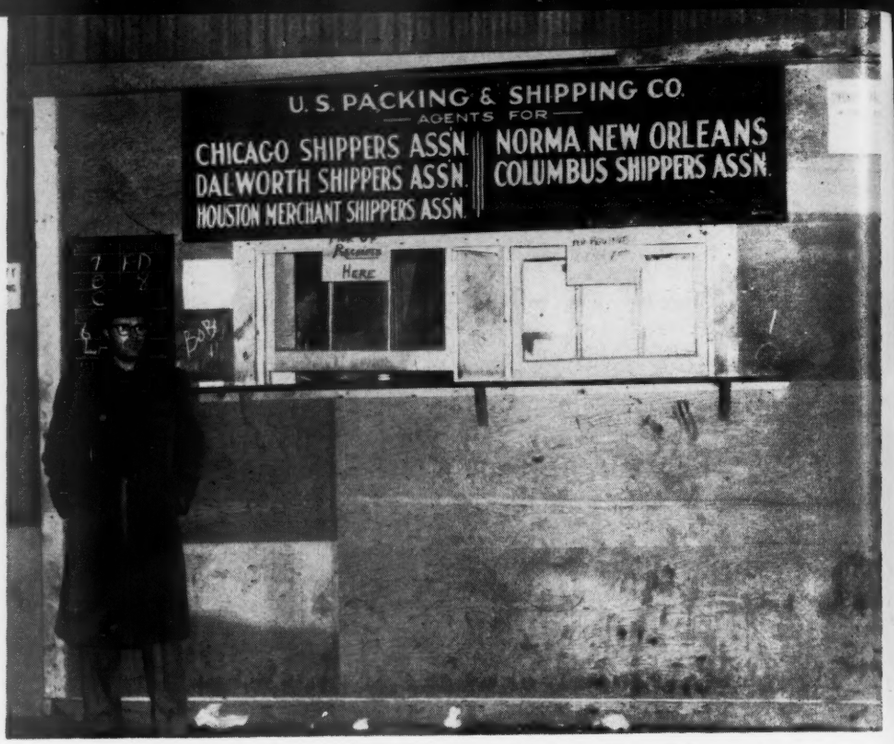
(e) sanitation facilities; and

(f) trackage, with service by the M.-K.-T.

Although these—and other similar industrial development projects—are locally financed and directed, the railroad makes available to each project management its accumulated experience gained from other similar undertakings, as well as collecting the experiences of other railroads in other developments. The Katy's industrial research and development department is, furthermore, an ardent and effective salesman for each and every such project on its line. And it is able to offer a nationwide coverage which could not be equalled by many local projects working on their own.

Pool Cars Bring L. C. L. Back to Rails

Head of U.S. Packing & Shipping Co. says good service and low rates are reasons for success of this operation in picking up traffic



At U. S. Packing's facility at 37th Street on Manhattan's West Side, a sign identifies the receivers' associations for which Mr. Kreis's company is agent.

The following is a report of an interview by a Railway Age *editor with S. A. Kreis, president of U. S. Packing & Shipping Co., largest of the independent pool car consolidators in New York.*

Reporter—Mr. Kreis, just what is it that U. S. Packing & Shipping does?

Mr. Kreis—We act as New York agents for various receivers' associations and consolidate into carloads freight (shipped from New York and destined to the members of the associations) that normally would go l.c.l., or via some other form of small lot shipment. We are not freight forwarders. For our work we receive only a consolidation charge of 15 cents per 100 lbs., with a minimum of 12 cents for handling any shipment.

Reporter—How much business do you do?

Mr. Kreis—Oh, we forward an average of about a half-million pounds (250 tons) of freight daily, five days a week. That goes out in 20 to 30 cars, depending on the kind of freight we get that day.

Reporter—What happens to your carloads when they reach the destination station?

Mr. Kreis—The receivers' associations appoint agents, who generally are local truckers, to receive the freight and deliver it to the individual consignees. That agent, of course, gets a fee for handling and delivery.

Reporter—What makes receivers choose this service instead of rail l.c.l., freight forwarder, trucks, or others?

Mr. Kreis—Lower rates and better service than are provided by l.c.l. or l.t.l. service. The all commodity rates under which our shipments move are 45 per cent of first class, with a 30,000 lb. minimum, in Official territory. With this arrangement, a big advantage is that in the case of small shipments the minimum charges provided in the classification do not apply. Also, if commodity rates lower than our all commodity rate have been published for the shipper's product he gets the benefit of that rate. The Toledo shippers, incidentally, think they'll save about $200,000 a year in freight bills by using this service, while Detroit, which is just considering the plan, expects to save its members more than 50 cents per 100 lbs. shipped. Then we get carload freight service which is way better than l.c.l., generally speaking.

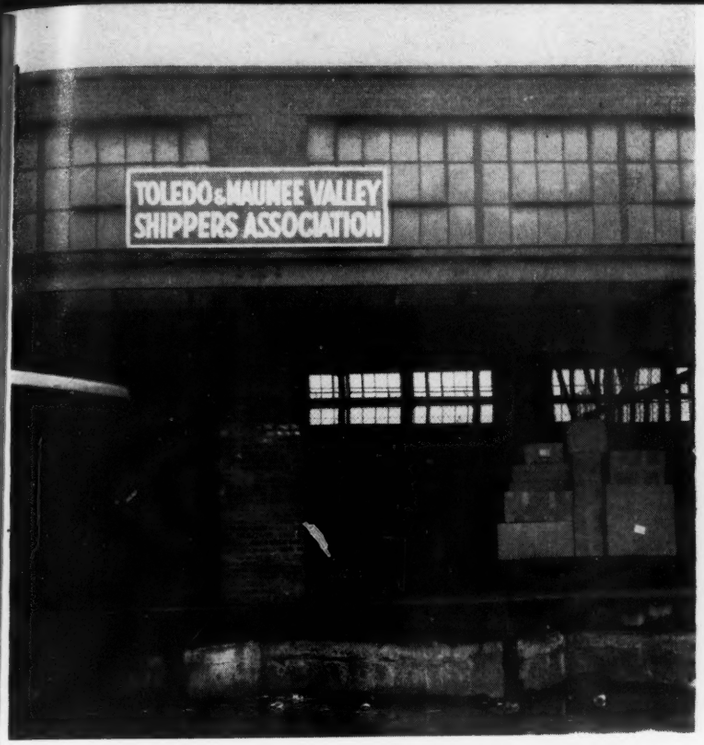
We've been getting good service, I might say. Of course, during snowstorms or such emergencies it has left something to be desired, but you can expect a certain amount of that. Another service feature that people like is the ease in tracing shipments which the system provides. The same day that a car leaves New York, a complete manifest of its contents, broken down by individual receivers, is air-mailed to the distributor, who turns over appropriate portions of the manifest to each association member. Since these manifests show the date the car left New York, and the car number, the merchants know just when to expect their shipments. I've been told that this helps them in regulating their stocks and in setting up their advertising schedules. They like that.

Reporter—Recently, many shippers have been complaining about railroad carload service, and here you say that you have been getting good service, by and large. Could you be a little more specific?

Mr. Kreis—Railroad carload freight service is not bad. For example, the Pennsylvania regularly is making Columbus, Ohio, for second a.m., out of New York, while that road and the Missouri Pacific have combined to give us consistent third morning service to Kansas City. Similarly, the P.R.R. and the Southern (via Cincinnati) are making New Orleans fourth morning in good shape. On our movements to Dallas and Fort Worth, the P.R.R. has combined with the M.P. and the Texas & Pacific to make fourth morning. Also, some cars for these points are routed via the P.R.R. and the St. Louis-San Francisco. These cars make about the same time. The New York Central consistently gives second a.m. to Toledo. No, we can't complain.

Reporter—I've heard it said that a good bit of this business that you handle came back to the railroads from the truckers. Is that so, and if it is, how much?

Mr. Kreis—I can't answer that in pounds, tons or dollars and cents. But, for example, all the business we are handling for Kansas City used to go truck. Most of



At the New York Central's 33rd Street freighthouse, U. S. Packing & Shipping handles shipments for the Toledo area.

Shippers' vehicles unloading freight to the platform at 37th Street for loading in pool cars.

our business to Toledo and Columbus formerly moved by truck, while the St. Louis business would have gone to the trucks but for the service-rate set-up that we now have.

Reporter—How many cities are now being served by you through this means?

Mr. Kreis—Chicago, Kansas City, Milwaukee, New Orleans, Toledo and Columbus, Ohio, Dallas and Houston, Portland, Ore., Oakland, Cal., and Baltimore. Incidentally, many smaller cities have joined the shippers' associations in the larger towns, in order to take advantage of the service. For example, receivers in Zanesville, Ohio, Canton and several other cities are members of the association at Columbus. Receivers as far away from Kansas City as St. Joseph and Topeka belong to that group, while smaller cities such as Green Bay belong to the Milwaukee group. Merchants in the smaller towns generally have their consignments trucked to them from the railroad destination station.

Reporter—What do you think is the future of this business?

Mr. Kreis—There's lots of business floating around that could be picked up. As a matter of fact, there are only two factors that are preventing its faster spread: (1) lack of rail facilities at which we can set up; and (2) shipper-receiver failure to realize the advantages of this pool-car service. A great deal of this latter is simply because some of the receivers are competitors and can't see how it would be to their advantage to climb into the same bed with their "adversaries." As far as the former is concerned, some railroads don't seem to realize that we have to have the facility before we can make many overtures to the shippers and receivers. The Pennsylvania has provided two of them for us but we've just about outgrown them already. We can't go after much more business until we have enlarged facilities. Incidentally, the New York Central is going to build a facility for us in midtown Manhattan.

Reporter—Where does most of your business come from?

Mr. Kreis—The larger part of our business comes from clothing manufacturers here in midtown Manhattan. However, as you can tell from looking at these manifests, we get a pretty good assortment. Some of our business is trucked here from as far away as Virginia to make these cars. The receiver pays more than either the l.c.l. or l.t.l. rate so that he can take advantage of the good service we're getting.

Reporter—You mentioned that most of your business comes from the clothing manufacturers, and that most members of the receivers' associations are department and specialty stores. Would there be anything to keep other manufacturers or industries from joining such groups?

Mr. Kreis—Not at all. To date they just haven't seen the wisdom of such a move, and frankly, we've been so busy that we haven't had the time to approach their associations. You see, our main customers are makers and sellers of commodities on which the profit per unit is rather small. They make their money on doing volume business. On that type of traffic transportation costs play an extremely important part in the manufacturer's ability to market his product. Naturally such firms were the first to appreciate the virtues of our plan.

Reporter—Mr. Kreis, what about similar service for smaller cities? I raise this question because all of the cities you have mentioned are pretty good-sized places.

Mr. Kreis—Well, up to the moment it's pretty difficult to tell. It's likely that they would not receive more than an occasional car, and therefore the situation is not so favorable for any of the parties concerned. It might be possible to make a car for two fair-sized cities that are fairly close together.

Reporter—Mr. Kreis, has this sort of service been worked out for shippers out of other cities? Or if it hasn't, could it be?

Mr. Kreis—To a very limited extent it has been. We've been asked to set up in other cities, but there's plenty of freight here that we have yet to get, so I think we'll just stay in New York.

Platform roofs are of steel Galbestos "V" beam roofing, so constructed that girders are not needed along the outer edges.

C. N. J. Combines New Station and

New facility at Elizabeth constructed to speed up freight handling—Wide platforms, cross-over bridges featured

The "headhouse" can handle 34 trucks at one time, when both front and side platforms are used. Steel overhead type doors are 10 ft. high and 20 ft. wide. Canopies cover truck tail gates for protection against weather.

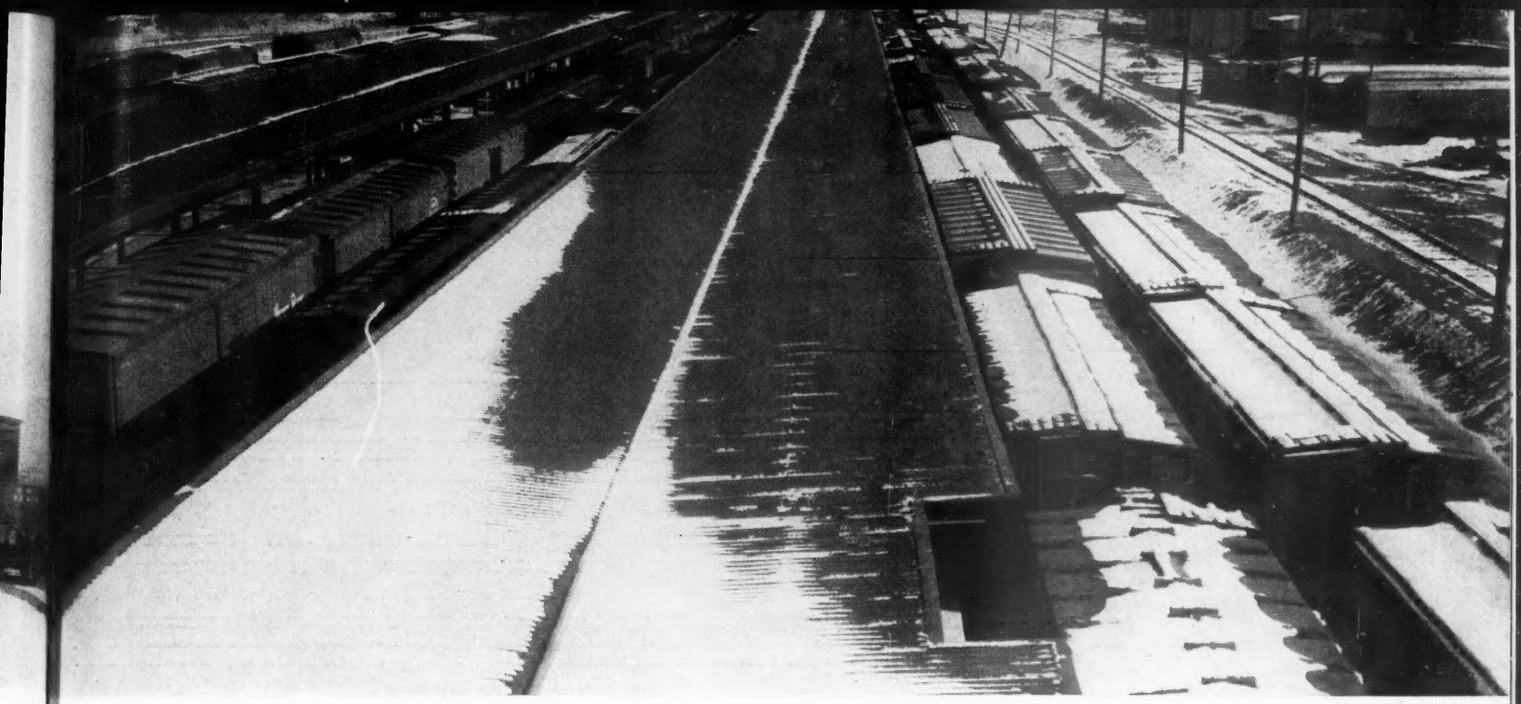
Lighting throughout the offices is of the fluorescent type. Where ceilings are of acoustic tile the fixtures have been recessed into the ceiling.

The new metropolitan freight station of the Central of New Jersey, built at a cost of approximately $1 million. is designed to speed up the handling of freight. Wide platforms (28 ft.) and Bascule balance type cross-over bridges between the two transfer platforms give plenty of room for maneuvering mechanized equipment and at the same time reduce to a minimum the distance covered in transferring freight to and from cars at the two platforms. A talk-back loudspeaker paging system not only makes contacts with persons on the platforms in a short time but is handy as well in dispatching fork trucks or tractors to areas where needed.

This new facility consists of a two-story freighthouse and office building (40 ft. by 172 ft.) and three platforms, one enclosed and the other two covered. The freighthouse and office building is a fireproofed structure, constructed of steel, brick masonry and reinforced concrete, supported on a concrete pile foundation. The transfer platforms also are constructed of reinforced concrete, steel and brick masonry, and are supported on the same type foundations. The pile foundation for these structures was found to be more economical than pier construction inasmuch as the ground on which the station is built is partially a filled-in area. The piles vary in length from 20 ft. to 25 ft. and were designed to sustain a load of approximately 30 tons. Cast-in-place Raymond concrete piles (576 of them) were used throughout.

The first floor of the headhouse and office building

(*Continued on page* 68)



A part of the house set at the Jersey Central's new Elizabeth transfer. At the right center can be seen wheels stored at the repair track. Eastbound yard is out of the picture at the right.

Trucks to Improve L. C. L. Service

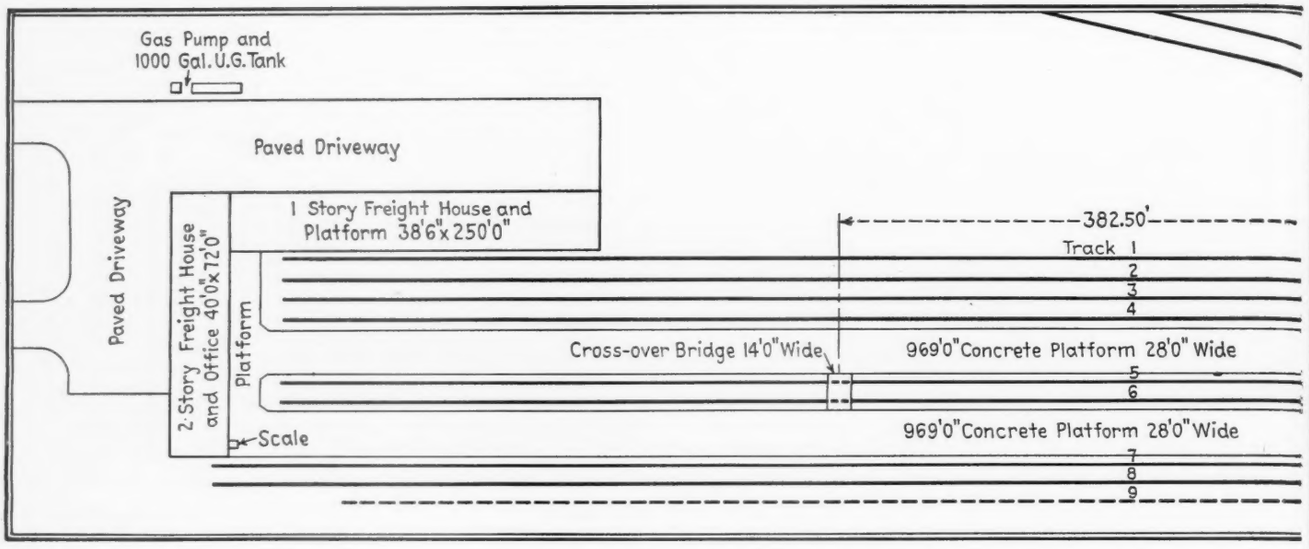
Door-to-door trucks from transfer by-pass local stations and speed up service as much as 50 per cent

Coordinated truck service by which l.c.l. freight is delivered direct to the receiver's door in several northern New Jersey towns without the necessity of the freight going through the local freight station, is speeding up transit time on such shipments and is, thereby, bringing new business to the Central of New Jersey. (Savings in l.c.l. transit time go as high as 50 per cent.) This truck service, which also picks up on the same basis as the deliveries, serves Newark, Elizabeth, Grasselli, Carteret, Roselle, Cranford, Garwood and Westfield, and is based on the C.N.J.'s new metropolitan freight station and transfer at Elizabeth, N. J. In addition to providing better service and increasing business, this trucking service is releasing cars for other loading, saving about 15,000 car-days per year, and has enabled the railroad to discontinue handling l.c.l. at the above named local freight stations.

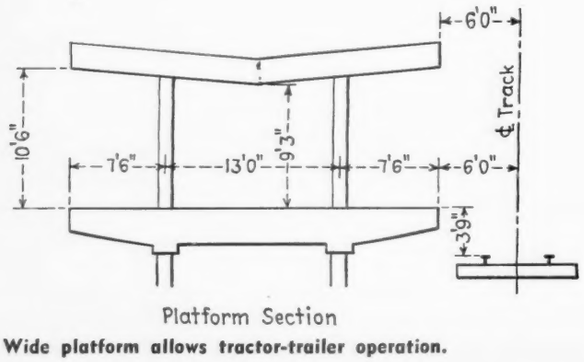
Prior to moving into this new structure and establishing the coordinated truck service, the old Elizabethport transfer made up cars to the local stations in towns now served by the trucking service. Since the volume of freight destined for any one station frequently was not large enough to justify dispatching a car on a given day, the car would be "set back" until the next day to wait for more tonnage. Sometimes holidays or week-ends intervened, delaying the shipment further. At the local station the shipment occasionally was delayed another day before delivery. Now shipments are delivered currently,

(*Continued on page* 69)

This fork truck is being used at Elizabeth to handle a heavy shipment of household goods.



Maximum freight handling efficiency is expected at Elizabeth due to



Platform Section

Wide platform allows tractor-trailer operation.

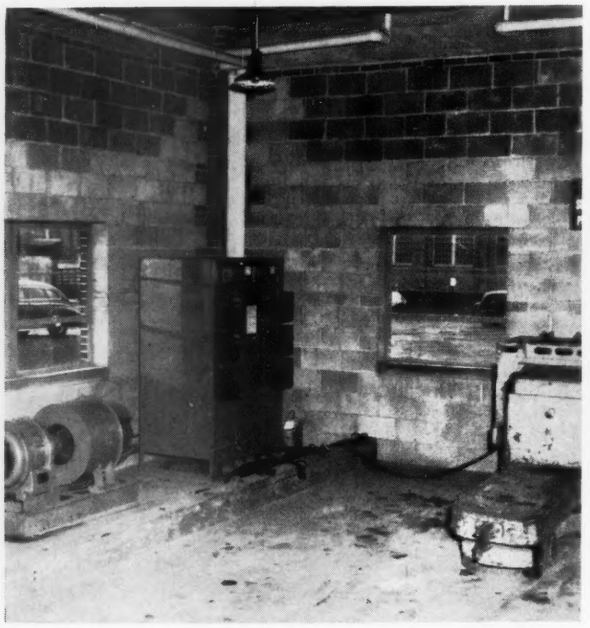
FASTER FREIGHT HANDLING

(Continued from page 66)

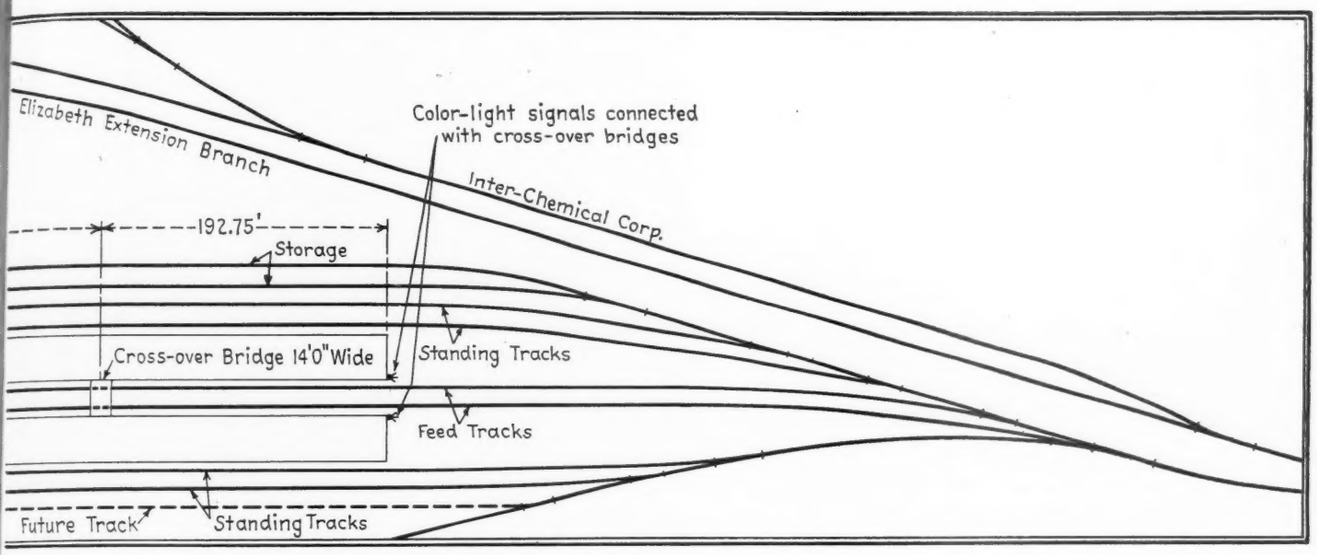
provides space for handling pick-up and delivery freight, damaged freight, a cooper shop, battery charging room, offices for the foreman and cashier, as well as toilet facilities for freight handlers. On the second floor are quarters for office personnel (including wash room facilities), a record storage room, and lockers, washroom and toilets for freight handlers.

The building was designed with a view to reducing future maintenance costs to a minimum and at the same

Washroom facilities for freight handlers on the second floor include Bradley basins, showers and sinks as well as toilets.



The battery charging room on the first floor can accommodate five trucks at one time.



spacing crossover bridges so placed that travel is reduced to a minimum

time provide comfortable and efficient working quarters for all personnel. The interior walls throughout the personnel quarters are finished with marble-faced block, which will not require painting. The floors in the office quarters are Terraflex tile. Ceilings in the offices are acoustic tile, which minimizes noise from the typewriters and calculating machines.

The building itself is equipped with a wet fire line and hose reel conveniently placed at stairwells. The platforms have been provided with dry fire lines, with convenient hose outlets, equipped with an automatic solenoid valve, which can be operated from various stations along the platform.

Crossover Bridges

Two sets of Bascule balance type crossover bridges span two tracks between these platforms. These bridges are 14 ft. wide, have wooden decks and are located at approximately two-fifths and four-fifths the length of platforms from the headhouse. They have been so spaced to limit the trucking distance between platforms to a maximum of 200 ft.

In addition to these two long platforms, there is a one-story covered platform 40 ft. wide by 250 ft. long. This platform is constructed of reinforced concrete, brick masonry and steel, and in general incorporates the same construction details as the pick-up and delivery portion of the freight and office building.

These platforms are served by eight tracks, with a total capacity of 160 cars. The six tracks which abut the cross platform are equipped with earth-filled timber bumpers, while the two which do not abut the cross platform are provided with Hayes type bumpers.

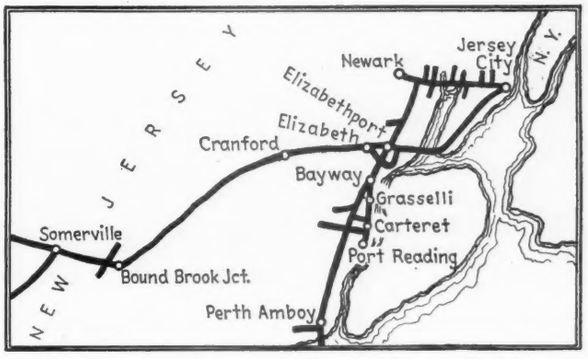
The general design was developed in the office of the chief engineer of the railroad in cooperation with the maintenance of way, operating, signal, electrical and freight traffic departments. General supervision of construction was done by S. L. Mapes, chief engineer, and B. J. Minetti, engineer of structures.

DOOR-TO-DOOR TRUCKING

(*Continued from page* 67)

through the use of the trucks. These trucks—at present four to six are required—are on the road each weekday morning at 9 a.m. and deliver the freight direct to the receiver. Once one of the drivers reaches the end of his run he calls the dispatcher, who tells him where to stop and pick up on the way back. Incidentally, shippers in towns of Garwood and Carteret can call Elizabeth at the local telephone rate, and the Jersey Central trucker will call for the freight. This pick-up and delivery service is charged for at the rate of 15 cents per 100 lb.

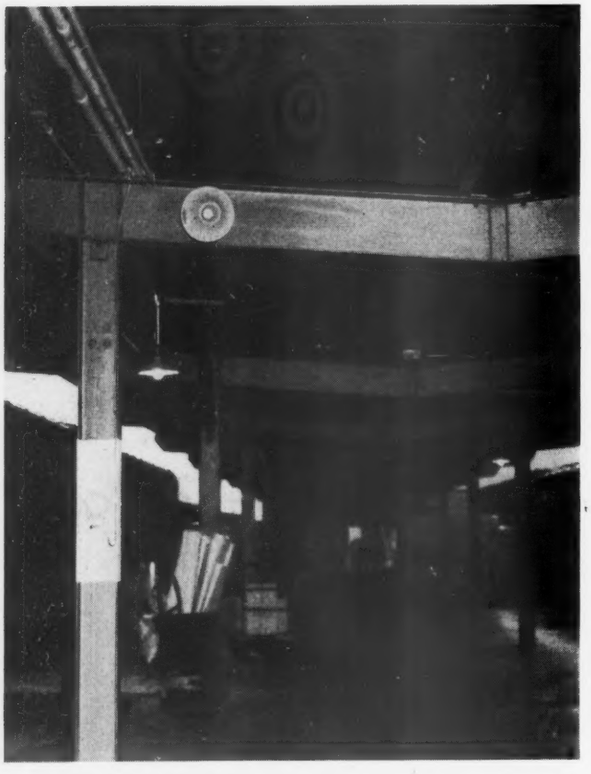
In the near future the Jersey Central plans to extend the trucking service to include Somerville, Perth Amboy,



This map shows where the Jersey Central's coordinated trucking service is now operating or will be extended.

The basic handling medium at Elizabeth is the tractor-trailer train. Tractors' burden-carrying platforms (to driver's rear) are smaller than usual.

Low-lift platform electric trucks can be used as burden carriers, or, since they are equipped with couplers, can tow trains of trailers.



Talk-back speakers of paging system are easily spotted by persons on platforms since their location is plainly marked in white. Platforms are electrically lighted and double receptacles are provided at frequent intervals for extension cords reaching to cars.

Manville, Bayonne and Jersey City, which will improve service to those points and bring the Jersey Central further savings in per diem and promote more economical use of scarce box cars.

Talk-Back System

The Jersey Central uses the Executone paging and talk-back system of communication to facilitate its work at Elizabeth. Agent Maran can contact his foreman or others on the platform without leaving his office. Similarly, check clerks who are about finished unloading one car can go to the nearest speaker, call the foreman and tell him to send along the waybills for the next car the gang is to work. (There are three talk-back stations on each transfer platform.) This saves considerable time compared with the old system where the checker used to lose valuable time going to the foreman's office. The talk-back system also is used in dispatching the fork truck to cars where there are extremely heavy or bulky shipments, which can be handled more easily by this means than any other.

Mechanical equipment used at the station to facilitate the handling of l.c.l. includes one electric fork truck, six electric low lift trucks, two combination tractor-burden carriers and 265 flat-bed rubber-tired trailers. When there are large shipments to be delivered to one consignee, such freight is loaded on a trailer, which in turn is put on the highway delivery truck. That freight is unloaded from the trailer at the shipper's receiving platform. Thus at least one piece-by-piece physical handling is avoided.

Elizabeth freight station is worked 12 hours per day, five days each week, normally, although, upon occasions, a sixth work day is necessary.

Deferred Maintenance Reaches $1,050 Million

Deferred maintenance in the amount of $1,050 million had accumulated on Class I railroads as of December 31, 1951, according to the latest issue of the "Railroad Maintenance Study" which is made annually by the Engineering Section of the Interstate Commerce Commission's Bureau of Valuation. This represents an increase of $100 million since the previous study, which put at $950 million the deferred maintenance accrued as of December 31, 1950.

Like this predecessor, which was reviewed in *Railway Age* of March 26, 1951, page 46, the present study found all of the deferred maintenance in fixed-property items. It followed the general plan of previous studies and it carried the usual disclaimer to the effect that it "has not been examined or passed on" by the commission.

The fixed-property items in which deferred maintenance was found, and the amount in each case, were shown in the study as follows: Superintendence, $34,785,000; ties, $365,528,000; rail, $174,795,000; other track material, $190,898,000; ballast, $21,074,000; tracklaying and surfacing, $407,217,000. These figures total $1,194,297,000, but the bureau deducted $132,600,000 to allow for surplus maintenance in equipment items, i.e., $130,000,000 in maintenance of locomotives other than steam, and $2,600,000 for superintendence. The net figure was $1,061,697,000 and the bureau adopted the $1,050 million as a round-figure estimate.

That the bureau is still not alarmed over the showing of these studies was indicated by inclusion in the present issue of the customary type of reassuring statement. "While the $1,050 million may seem large," it said, "it is less than half of the total maintenance expenditures for all accounts and is less than the maintenance of way and structures expenditures for a single year. Briefly, it reflects about 15 per cent deferred maintenance in the track accounts only and while not a satisfactory situation cannot as yet be considered serious."

Definition of the Term

Explaining its failure to find any deferred maintenance of equipment, the bureau said that "deferred capital expenditures" should not be confused with deferred maintenance. It added: "While we appreciate that there is a shortage of freight-train cars, which results in cars being kept in service beyond the economic service life, the fact that patchwork repairs only are being made to such cars does not indicate deferred maintenance. This type of deferred maintenance will eventually be taken care of through retirement when traffic declines or when new cars are available."

"Deferred maintenance," as used in the study, was defined as "an estimate of the expenditures above normal that should be and probably will be made by the railroads in the near future for the necessary labor and materials to make good the present deficiencies in maintenance (repairs and replacements) that are below normal and to bring their status to a 50 per cent condition on the average. . . . This deficiency is an estimated future financial liability against the carrier. It does not represent the total accumulated cost of necessary repairs and replacements since there may be surplus maintenance elsewhere in the property. It is the excess of below-normal maintenance over surplus maintenance."

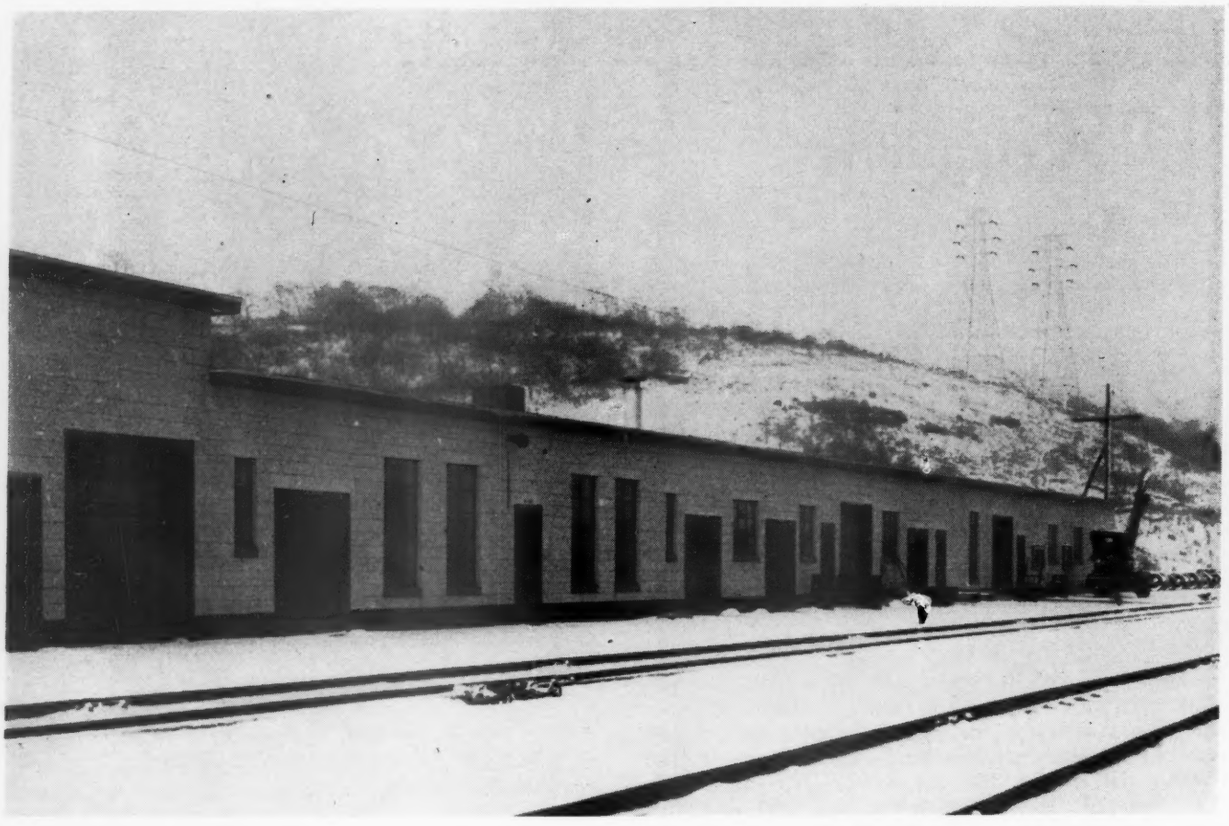
As to capital expenditures, the study distinguished between "deferred capital expenditures" (replacements protected by depreciation reserve), and "deferred capital improvements" (replacements involving improvements). The former were considered susceptible of "reasonably approximate" estimates. On that basis, the study found that "little, if any, deferred capital expenditures occur in fixed property accounts."

Of the equipment situation, the study had this to say: "At the close of the last war there were substantial amounts of deferred capital expenditures for equipment property, but extensive purchases of new diesel-electric locomotives and new freight-train cars during the past few years have practically eliminated these deferred capital expenditures for equipment as a whole."

Estimates of "deferred capital improvements" were found generally to be "somewhat intangible and almost unlimited depending upon the individual railroad." Exceptions were noted, however, in the case of rail and track material, for which the study estimated that capital improvements in the form of heavier weight have been deferred in the amount of about $50 million.

Other discussion in the study included explanations of its methods, which involved detailed chart studies on a dollar basis—except for the track accounts, where it has been found more expedient to use units of property. Adjustments were made to allow for the excess cost of overtime work, to convert to a "common dollar of equal purchasing power," and to reflect the effect on maintenance costs of changes from the "normal" volume of traffic.

As in previous years, the bureau "considered," but rejected, railroad contentions that there should be some adjustment for the "inefficiency of labor" during World War II and the postwar period.



The shop building, looking from the north.

New Light Repair Facilities Improve Working Conditions

Union Railroad plant at North Bessemer has level tracks with shops and storehouses in well heated and lighted building

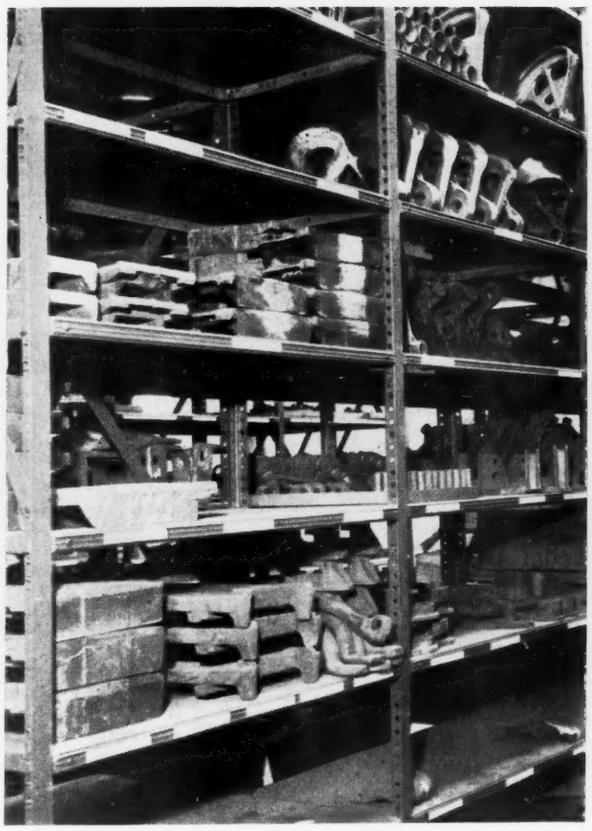
On September 10 last the Union Railroad placed in service new running repair facilities at North Bessemer, Pa. These include four repair tracks, comprising more than a mile of track with a capacity for about 90 freight cars. Shop and storehouse facilities are housed in a concrete-block structure. The complete project represents an expenditure of about $260,000.

Site of Shop

Work on the new plant site began in April 1950 with the preparation of the site for the tracks and the building. This required the moving of 33,000 cubic yards of earth from the hill extending into the plant site and filling the track area to provide for level tracks. This area adjoins the transportation yard which is down grade to the north.

Approximately 1,000 ft. of the channel of the creek which flows back of the site was changed, including the installation of 220 lineal feet of 30-in. and 36-in. reinforced concrete pipe. The work also included 1,500 lineal feet of roadway paved with slag.

The construction of the building began in October 1950. The one-story concrete-block structure is 215 ft. long. The major part is 30 ft. wide. The building houses the store room, a pipe and air room, blacksmith shop, a paint room, tool room, oil room, a compressor room, locker and lunch room, foremen's and clerks' offices, a heater room, and necessary sanitary facilities. A two-stage Chicago Pneumatic Tool Company air compressor was installed. The central heating plant consists of an oil-fired National steam boiler with McDonnell automatic feedwater control. This has a rated capacity of 1,250 lb. of



In the storehouse.

Handbrake wheels are stored on rods.

steam per hour. Distribution is through blower-operated space heaters, except in the foremen's and clerks' offices where fin-type radiation is used. A small building of the same construction is provided for the storage of oxygen and acetylene tanks.

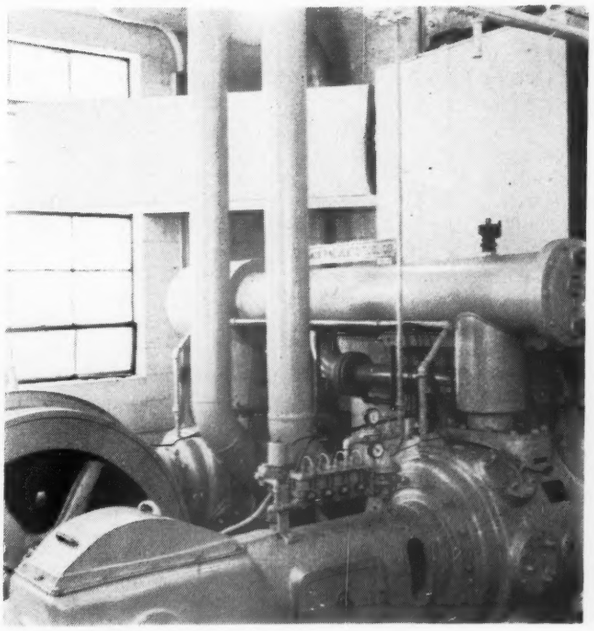
Easy Access to Crane Cars

The level-grade working areas adjacent to the repair tracks are paved with 5,300 sq. ft. of concrete. Track crossings at approximately the middle of the tracks and opposite the sectional lift door to the storehouse permit easy access of crane cars to all working areas. Entrance to each shop is from the outside of the building which allows each to operate as a unit without interference from other operations.

The work of preparing the site for the tracks and building was performed by the Dick Construction Company. The buildings were erected by the Ira C. Wilcox Company. Railroad forces laid the track and installed 700 lineal feet of 8-in. pipe for subgrade drainage.

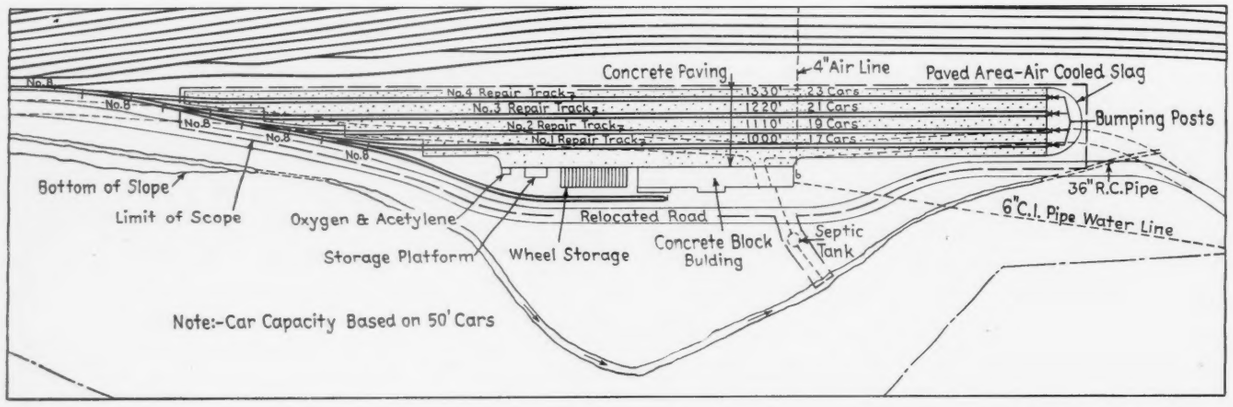
The new facilities adjoin the east, or northbound, side of the North Bessemer yard, which is the southern terminus of the Bessemer & Lake Erie where it delivers lake ore to the Union and receives empties and coal from the Union. Before the new facilities were built the repair tracks were on the opposite side of the yard adjoining the southbound ore yard. Facilities there were housed in more or less nondescript buildings of the character found at many freightcar repair tracks.

The repair tracks are entered at the south end from a ladder track which extends around to an unloading platform along the east, or back, side of the store room.

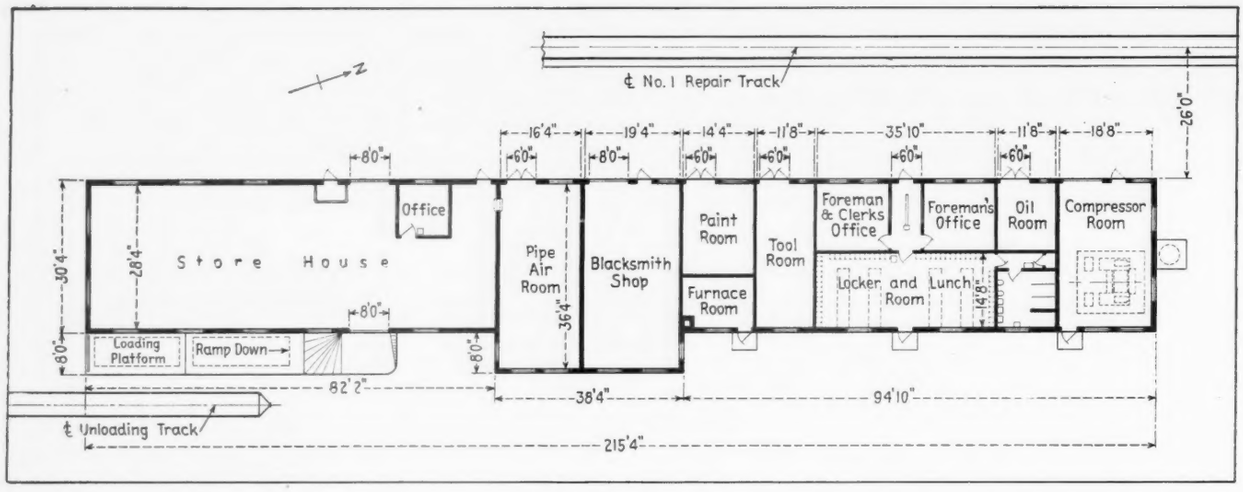


The air compressor.

They are 22 ft. center to center and the space between them is paved with concrete and slag for a width of 14 ft. 6 in., or about to the ends of the ties. The pavement between the tracks is 6 in. thick at the edges and 7 in. thick at the center. The tracks are filled in outside and



The general layout of the North Bessemer freight-car repair tracks.



Floor plan of the shop and store building.

between the rails for a runway at a point approximately opposite the doorway to the store room, so that heavy material can be moved by crane truck to any part of the working area.

Welding Outlets

All tracks are served with compressed air and electric welding outlets. Portable oxygen and acetylene tanks are also available. Two 3-in. air lines extend the length of the tracks on the ends of the ties of tracks Nos. 2 and 4. Double outlets with hose connections are spaced 25 ft. apart.

Outlets for welding current are located at three points alongside the west rail of tracks Nos. 1, 2, and 3. From these points welding cables can reach any part of the working area.

A three-phase a.c. power outlet and the d.c. welding current conductors that feed underground to the rails and to one group of three outlets are located opposite each group of outlets on the shop side of the tracks. One side of the d.c. circuit is grounded to the rails and the other side is connected to its group of three outlets.

A single portable Westinghouse Type RA welding set with a 440-volt three-phase primary and 300-amp. d.c. capacity can be connected at any one of the three stations.

The entire working area can be covered by one welding machine by moving from one station to another, or a total of three moves, or three welding machines could be used with no moves. The main advantage is that the welder need carry only one line and at no time will it be necessary for him to carry lines through or over cars.

The main building, which houses the store room, shops, offices and compressor room, has a flat roof supported on Gabriel Clerespan joists covered with 2-in. Gypsteel plank and five-ply asphalt roofing. Outside walls are 12-in. blocks; partitions, 6-in. and 8-in. blocks. The rooms have a clear height under the joists of 10 ft. 10 in. in the narrower part of the building and 10 ft. 6 in. in the wider part. An exception to this is the compressor room which has a clear height of 14 ft. 2 in. The major part of the lighting is by fluorescent lamps.

The principal shops are the pipe and air-brake room and the blacksmith shop. These adjoin each other in a part of the building the width of which is increased to 38 ft. Air-brake work is handled at the east end of the room (the back side of the building). Pipe work is done near the repair-track end of the room. The blacksmith shop has two coal-fired forges.

The tool room provides storage space for jacks, air tools and hose, oxyacetylene torches, welding electrode holders and cable, and miscellaneous small tools.

The paint and oil rooms are small. Facilities and room

The wheel storage tracks, looking toward the oxygen and acetylene storage tank building.

for the extensive mixing of paint are not called for. In the oil room is stored a working supply of journal-box packing and free oil. Packing is prepared at the main car shop of the road at Duquesne and distributed to the various repair points from there. Packing removed from cars on the repair tracks is shipped to that point for processing.

On the back side of the building behind the foremen's offices is a locker and lunch room and adjoining it at one end a toilet and washroom. The lunch room has tables to accommodate the men who work out of doors. Between the foremen's offices is the time-clock room.

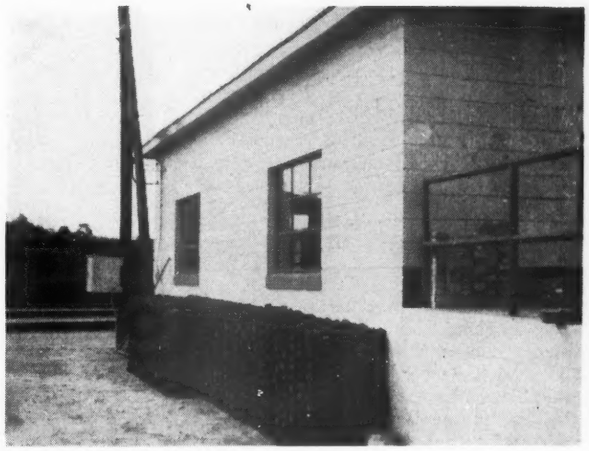
At the south end of the building is the store room. This is 87 ft. 6 in. long by 28 ft. 4 in. wide inside and is equipped with adjustable steel shelves. The storekeeper's office is partitioned off from this space near the north end and is accessible only from the inside. Sectional 8-ft. lifting doors are located opposite each other in the front and back walls. That on the backside opens at the foot of the ramp from the freight-car unloading platform.

Adjoining the store room on the south are the wheel-storage tracks. Wheels can be loaded and unloaded on cars on the storehouse track by a five-ton crane truck which is the major materials-handling facility on the plant. The same truck moves them to and from the repair tracks.

To the south of the wheel-storage tracks is a platform for brake beams and car castings, including couplers and truck castings. Beyond is the building for storing oxygen and acetylene.

In addition to the crane truck there is a motor-driven dump barrow. The crane truck takes care of the unloading of heavy material and distributes heavy parts about the working area. The barrow distributes smaller materials and collects and disposes of waste materials.

These repair facilities employ about 48 to 50 men, including foremen and clerks, and turn out an average of 60 light repairs per day. About 75 per cent of these are homeward bound to the B. & L.E. Ninety per cent are open-top cars and 5 per cent box cars.



The south end of the store room. On the pole in the background is an electric welder connection box.

Looking north toward the shop and storehouse.

Missouri Rates

Thirty railroads in Missouri have petitioned the Interstate Commerce Commission to investigate freight rates in that state. The roads allege that "substantial and unwarranted disparities" exist in favor of Missouri shippers because intrastate rates have not been brought up to interstate levels, and that failure of the Missouri Public Service Commission to authorize increases fully in line with those approved by the I.C.C. in Ex Parte Nos. 162, 166 and 168 is denying railroads in the state up to $1,000,000 a year in revenues.

The roads told the I.C.C. of their "extended efforts" to obtain relief from the state commission. Most recent order of the P.S.C. was issued June 1, 1951, which "in the main did not approve increases in the full measure authorized by the I.C.C."

Ore Argument for Seaway Falls on Three Grounds

The argument that the St. Lawrence Seaway should be built because United States iron ore reserves are insufficient, because Labrador is the "most important" secondary source of iron ore, and because the seaway is needed to transport that ore, "falls on all three grounds," Carroll B. Huntress, chairman of the National St. Lawrence Project Conference, told the New York Railroad Club at its regular meeting on February 26.

Domestic reserves of high grade iron ore, Mr. Huntress said, are sufficient for at least 30 years, with domestic reserves of low grade taconite iron ores adequate for 200 years; Labrador is only one of many alternate sources of ore, and at least three practicable routes other than the proposed seaway are available for movement of Labrador ores to midwestern steel plants, he asserted. In the latter connection, he stated that existing rail-water routes can move Labrador ore "as far as the Ohio line competitively with any other form of transportation."

On the same program with Mr. Huntress was James W. Danahay, vice-president and managing director of the West Side Association of Commerce of New York, who discussed the effect of the seaway on the port of New York. Mr. Danahay contended that construction of the seaway would take away from 44 to 50 per cent of the export-import tonnage, exclusive of petroleum, now handled through New York.

"The very commodities," he said, "which the Department of Commerce says would use the St. Lawrence most, are the same which now move most through New York." He estimated that at least 1,200,000 persons in the New York metropolitan area would be directly adversely affected by the seaway and that the "consequent reduction in New York's purchasing power" would substantially cut its purchases from the 10 Great Lakes states which are the principal proponents of the St. Lawrence project.

Ohio's Belt Conveyor "Comes to Life" Again

Although formal action by the Ohio state legislature was shelved last year, Riverlake Belt Conveyor Lines, Inc., is still seeking active support for its proposed 103-mile overland coal and ore carrier.

Early this year the corporation solicited — by mail — the endorsement and support of numerous business leaders throughout the state. The corporation's vice-president, V. H. Johnson, who is also assistant to the president of the Akron, Canton & Youngstown, in a widely circulated letter, told Ohio business men that construction of the belt conveyor would mean cheaper steel, more markets for Ohio coal and expansion of the state's steel industry. He asked each recipient to serve on the "Committee for Belt Conveyor Legislation" by writing a letter, or talking personally, to his legislator.

Representing the railroads opposed to the belt scheme, R. H. Flinn, assistant to the Pennsylvania's Central region vice-president, replied to Mr. Johnson's message in a letter circulated to shippers, railroad suppliers and civic leaders on February 11. Said Mr. Flinn: "The railroads cannot and will not compromise on the issue of the conveyor line. Already they face much unfair competition, permitted and promoted by state and federal laws. The

American-Swedish News Exchange

MODEST COMFORT and modern decoration are the distinguishing features of this private railway car, recently rebuilt and redecorated for the use of King Gustaf VI Adolf and Queen Louise of Sweden.

NEW SERVICES AND PUBLICATIONS OF INTEREST TO SHIPPERS

ATLANTIC COAST LINE—New over-the-road truck service for l.c.l. began on February 16, covering following routes daily, except Saturday and Sunday: Florence, S. C.-Chadbourn, N. C.; Rowland, N. C.-Pee Deed, S. C.; Florence-Cheraw; Darlington-McColl, with stations on Hartsville branch also included; Florence-Kingstree; Creston-Dunbarton; Creston-Elleree; Charleston-Green Pond; Green Pond-Ehrhardt; Chadbourn-Rowland, N. C. Trucks will make round trips daily and will serve all but a few of the stations between points mentioned.

BALTIMORE & OHIO—Has made the following changes in its scheduled car lines:

Car lines discontinued:

Pittsburgh to Binghamton, N. Y. (D. L. & W.); Punxsutawney, Pa., to Binghamton (D. L. & W.); Buffalo to Binghamton (D.L. & W.); Baltimore to Lawrence Tfr., Mass., (B. & M.)

New car lines:

Pittsburgh to Scranton Tfr., Pa. (D. L. & W.); Punxsutawney to Scranton Tfr. (D. L. & W.); Buffalo to Scranton Tfr. (D. L. & W.); Louisville, Ky., to Maybrook, N. Y. (N. Y. N. H. & H.); Newark, Ohio, to Relief, Ohio; Philadelphia to Twin Oaks, Pa.; Baltimore to Boston (B. & M.); Baltimore to Long Island City, N. Y. (L. I.).

Substituted truck service to points on following routes:

Cincinnati to Middletown, Ohio; Dayton, Ohio, to Arcanum; Brookville, Ohio-Greenville-Tipp City-Vandalia.

BOSTON & MAINE—Has published, dated February 1952, two lists of scheduled merchandise cars:

List No. 15—"Through Merchandise Cars to Principal Cities and Transfers Serving New England Destinations and Beyond Markets."

List No. 16—"Schedule of Merchandise Cars for Less Carload and Package Freight Forwarded and Received Locally."

CHESAPEAKE & OHIO—*Has issued a 12-page booklet containing schedules of its principal merchandise trains.*

CHICAGO & NORTH WESTERN—Has discontinued its Proviso, Ill., to Lombard package car, replacing it with substituted truck service.

CHICAGO, BURLINGTON & QUINCY—*Has opened a new traffic office in Room 206, Royal Bank building, Toronto, telephone WAverly 5962. Frank Wall is general agent.*

Freighthouse No. 5 at 16th street and Union avenue, Chicago, is being repaired and has been restored to service.

CHICAGO, ROCK ISLAND & PACIFIC—Has opened its new freighthouse at Armourdale yard, Kansas City. This freighthouse, with overhead tow-conveyor system, is expected to reduce terminal time of freight at Kansas City by seven-eight hours.

DELAWARE, LACKAWANNA & WESTERN—*Has added to its list of scheduled car lines a car from Syracuse, N. Y., to Chicago (Grand Trunk Western).*

ERIE—Has issued transportation department circular L. C. L.—3B, "Scheduled Less-Carload Merchandise Car and Truck Lines," effective January 15, 1952.

NASHVILLE, CHATTANOOGA & ST. LOUIS—*Has opened, effective March 1, a new traffic office in Room 2337, Koppers building, Pittsburgh 19. K. E. Skillman is general agent in charge.*

NEW YORK CENTRAL—Has made the following changes in its scheduled car lines:

Car lines discontinued:

New York (33rd St.) to Hudson, N. Y.; Utica, N. Y., to San Francisco (S. P.); Pittsfield, Mass., to Utica ("Pacemaker"); Indianapolis to New Castle, Ind.; Greensburg, Ind., to Cincinnati; Louisville to Cleveland; Columbus, Ind., to Cincinnati; Buffalo to Binghamton, N. Y. (D. L. & W.); Chicago (Polk St.) to Binghamton (D. L. & W.); Cleveland to Binghamton (D. L. & W.); Detroit to Binghamton (D. L. & W.); Syracuse, N. Y., to Binghamton (D. L. & W.); Toledo to Binghamton (D. L. & W.).

New car lines:

Buffalo to Scranton, Pa. (D. L. & W.); Chicago (Polk St.) to Scranton (D. L. & W.); Cleveland to Scranton (D. L. & W.); Detroit to Scranton (D. L. & W.); Syracuse to Scranton (D. L. & W.); Toledo to Scranton (D. L. & W.); Greensburg, Ind., to Indianapolis; Columbus, Ind., to Indianapolis; and East St. Louis, Ill., to New York (33rd St.) ("Pacemaker").

The N. Y. C. also has just issued a one-page listing of its scheduled "Pacemaker" cars.

PENNSYLVANIA— Has made the following changes in its scheduled car lines:

New car lines:

Williamsport, Pa. to Columbus, Ohio (C. & O.); Williamsport to Cincinnati (L. & N.); Williamsport to St. Louis (M. P.); Pittsburgh (11th St.) to Washington, D. C.; East St. Louis to Cleveland; Cincinnati to Detroit.

Has issued to all employees engaged in freight service a booklet entitled "The Case Against Rough Handling: A Pictorial Story of Carelessness, Waste, and Monetary Loss."

Freighthouses at Columbus and Chicago (Polk St.) now are working seven days per week to expedite handling of l.c.l. Polk St. works 16 hours daily, Monday through Saturday, and eight hours on Sundays.

READING—Industrial development department has issued a four-page bulletin, dated January 1952, on available industrial properties along the Reading. Features sites in Philadelphia and Trenton, N. J.

---

railroads have retreated as far as they can, or intend to. They will fight any proposal that gives any individual or any corporation the right to carry only two or three profitable commodities — leaving to the rails the legal requirement to transport commodities on which they lose money."

Before the conveyor belt can be constructed, the Ohio legislature must grant it the right of eminent domain as a common carrier. The conveyor lines must also obtain a certificate of convenience and necessity from the state's public utilities commission. Opponents of the belt have maintained that, because it will transport only coal, ore and limestone for a limited number of manufacturing plants, and because it offers no service for the small shipper or between wayside points, the belt is not entitled to consideration as a common carrier. The matter was not decided by the state legislature during the 99th general assembly last year, as the principal bill died in committee.

Oil Study Finds Need For 6,700 More Tank Cars

By the end of 1952, the fleet of general-purpose tank cars should be expanded by 2,000 cars while the pressure-car fleet should be expanded by 4,700 cars, according to a study made for the Petroleum Administration for Defense.

The study was completed about the middle of last year, but the report on it became available only last week. It is a 118-page document, entitled "Transportation of Oil," and copies may be purchased for $1.75 each from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

The study was made by a group of eight P.A.D. consultants, under the direction of John W. Boatwright, who is associated with the Standard Oil Company of Indiana as general man-

News Briefs . . .

. . . Inauguration of an employee-management plan on the Rutland has been announced by Sidney M. Rodgers, general manager. The plan calls for a series of monthly meetings between supervisors and local chairmen and other employees in each department, "for the sole purpose of promoting a better understanding between employees and management for the mutual benefit" of the railroad and its employees. The plan is not intended, Mr. Rodgers emphasized, to replace in any way regular procedures set up under the Railway Labor Act for negotiation of claims, grievances, rates of pay, etc.

. . . Conversion of an all-steel, air conditioned lounge car into a mobile blood procurement unit is being undertaken in the Great Northern's shops at St. Paul. Operation of the car—which will begin about March 15—will initially be confined to cities and towns in Minnesota and the Dakotas, but will later be extended to cover communities along G.N. lines from St. Paul to the Pacific coast. The car will be provided and operated over the system without cost to the Red Cross, but will be staffed by Red Cross workers who will receive assistance as needed from local chapters of the organization.

. . . Two 68-ton marine boilers, one of the largest freight shipments ever handled by a railroad in North America, recently were transported by a special Canadian National train from Collingwood, Ont., to St. John, N.B., 1,034 miles. The boilers measured 19 feet high from the rails and were 15½ feet wide. They rode in two depressed center flat cars, ballasted with 10 tons of pig iron to adjust the center of gravity. Because the boilers were three feet wider than the cars, many switch stands and signals along the route had to be removed. A crew of section men and signal maintainers rode the train to replace stands and signals as the shipment proceeded. The boilers, owned by the Atlas Maritime Corporation of New York, were loaded aboard ship at St. John for delivery to Argentina.

. . . The Long Island has retained Howard Ketcham, noted color and design engineer, to develop new lighting and decorating standards for its passenger-car interiors. The standards will be used in remodeling existing cars as well as for new cars the road may buy. Results of Mr. Ketcham's work will be incorporated in two special display cars which will be exhibited publicly. Long Island passengers will be asked to select one car as the model for future treatment of all the road's coaches.

. . . A group of 24 traffic representatives from both on- and off-line offices gathered in St. Louis on February 25 for a 10-day educational tour of the Southwest over the lines of the railroad they represent—the Missouri-Kansas-Texas. The tour was aimed at teaching the junior traffic men more about: (1) The Southwest; (2) the Katy—its personnel, equipment and plant; and (3) the industrial, business and residential areas of each of 14 cities on the railroad. The group traveled in company with top traffic officers of the road, who acted as "instructor."

. . . Helen Tieken Geraghty, producer of the railroad pageants "Wings of a Century" (during Chicago's Century of Progress Exposition in 1933 and 1934) and "Wheels A'Rolling" (during the city's Railroad Fair in 1948 and 1949), has been selected to produce a new pageant for the "Centennial of Engineering," which Chicago will celebrate this summer. Mrs. Geraghty's latest project will portray outstanding contributions the engineering profession has made to the American way of life.

ager of its Distribution Economics department.

As to tank cars, the report found that the general-purpose fleet totaled 84,523 cars as of January 1, 1951, when the fleet of pressure cars in petroleum service totaled 10,302 cars. The process of adding 2,000 general-purpose cars was expected to involve production of some 6,200, because it was estimated that 4,200 will be required to replace scrappage during 1951 and 1952. Meanwhile, scrappage of pressure cars was expected to be "negligible."

Railroads Got 33 Per Cent More Steel in 1951

The American Iron & Steel Institute has announced that railroad transportation received 1,450,902 tons more steel in 1951 than in 1950. This was an increase of 33 per cent, the institute said. Altogether, steel shipments in 1951 were up 9 per cent, or 6,696,658 tons, over those of 1950. Total shipments for railroad use were about 5.7 million tons.

Shipments to all industry of plates, hot rolled bars and structural shapes increased sharply, the institute said, with substantial portions of these increases going for the railroads' freight car building and repair programs.

I.C.C. Approves Fare Increase on C.N.S. & M.

Increased coach fares on the Chicago North Shore & Milwaukee, calculated to increase annual revenues by not less than $125,000, have been approved by the Interstate Commerce Commission.

The road was authorized to boost one-way fares from 2.5 cents to 3 cents per mile, from the minimum-fare distance up to 22 miles. For distances between 22 and 26.5 miles, a uniform rate of 66 cents will apply. At 26.5 miles and beyond the present 2.5-cent fare will remain in effect. Round-trip fares will be on the basis of 90 per cent of double the one-way fare.

The road expects its more frequent service and stops for lesser distances to help hold its short distance passenger traffic, in spite of this fare increase.

Gass Cautions Against Car Supply "Complacency"

Arthur H. Gass, chairman of the Car Service Division of the Association of American Railroads, has cautioned shippers and receivers of freight, as well as the railroads, against "any attitude of complacency" regarding box car supply in 1952.

"With the steel allocations for new freight cars seriously curtailed, additional ownership cannot be expected, and if commodities requiring box cars are to be moved with dispatch everyone must work toward better utilization of existing equipment," Mr. Gass said.

The warning was contained in the latest issue of "The National Transportation Situation," regular monthly publication of the Car Service Division.

Box car loadings in 1952 are slightly under last year, but demands for higher class box cars are now "very brisk," Mr. Gass reported. Shortages of these better grade cars have been reported, mostly by western roads.

"While the present shortages do not indicate a serious situation there is every indication that as the year progresses the trend will be one of increasing requirements with a consequent need to obtain maximum utilization from every box car," the C.S.D. chairman said.

Grain Movements

Recent heavy movements of grain for export are very good insofar as box car supply for the coming months is concerned, Mr. Gass continued. He said this will give more opportunity to protect new grain crops and other commodities later in the year.

Mr. Gass reported that eastern roads have been concentrating on return of western ownership box cars, both under car service rules and outstanding quota orders. Every effort is being made to distribute box cars so as to minimize shortages and provide all roads with their share of equipment, he said.

Commenting on other types of freight cars, Mr. Gass found there has been "some relaxation in demands" for hoppers in the past month. The supply of gondolas has "improved considerably" in recent weeks, but more shortages are being reported in both plain and special-type flats.

A tentative program of 96 million tons of iron ore has been set for movement on the Great Lakes during the approaching navigation season, Mr. Gass said in discussing open top cars. Meanwhile, an all-rail movement of iron ore is handling about 100 cars a day from the northwest ranges to

"OUTSTANDING YOUNG MAN of 1951" in Norfolk, Va., was Robert N. Hoskins, industrial forester for the Seaboard Air Line, who is shown here (left), receiving a Distinguished Service Award from Paul G. Caplan, president of the Norfolk Junior Chamber of Commerce.

eastern and southeastern steel mills.

Turning to the matter of new equipment, Mr. Gass said Class I roads had 98,566 freight cars on order February 1 — about a 14-month backlog at the January rate of installation. These roads installed 6,710 new cars in January.

Serviceable ownership February 1 was 6,400 cars higher than at the beginning of the year, Mr. Gass reported. This was accomplished by a gain in ownership of about 3,000 cars, and a decrease in the number of cars held for repairs.

As to locomotives, the C.S.D. chairman noted that 261 were installed in January, and that two roads — the Charleston & Western Carolina and the Colorado & Wyoming — retired their last steam locomotive during the month.

"Diesels are now accounting for 55 per cent of all gross ton-miles in freight service, 65 per cent of passenger train car-miles and 70 per cent of all yard engine hours," Mr. Gass said.

Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended February 23 were announced by the Association of American Railroads on February 28 as follows:

	Surplus	Shortage
Plain Box	800	1,031
Auto Box	202	0
Total Box	1,002	1,031
Gondola	319	939
Hopper	1,737	416
Covered Hopper	297	0
Stock	2,366	0
Flat	491	605
Refrigerator	1,739	152
Other	371	15
	8,322	3,158

Preliminary figures on freight car performance in 1951 were contained in the report. Mr. Gass said they indicate ton-mile output per serviceable car in 1951 was "substantially greater" than in 1950.

Net ton-miles per serviceable car per day averaged 1,028 for the year 1951. This compares with 972 in 1950. For the month of December 1951, alone, the average ton-mile figure was estimated at 939. This was below the November average of 1,034, and also below the December 1950 average of 988.

Reports compiled by 467 Shipper Car Efficiency Committees in various shipper-board districts indicated that cars detained beyond the free time of 48 hours averaged 15.3 per cent of those placed in January. This compared with 15.42 per cent the previous month and 15.95 per cent in January 1951.

CAR SERVICE

I.C.C. Service Order No. 865, which imposes super-demurrage charges running up to $20 per day, has been modified by Amendment No. 22, which suspended, from March 1 until May 31, the order's provisions insofar as they applied to tank cars.

I.C.C. Service Order No. 867, which governs the handling of trap or ferry cars containing l.c.l. freight within a switching district, has been modified by Amendment No 5, which set back the expiration date from February 29 until May 31.

I.C.C. Service Orders Nos. 870 and 871, which restricts the free time allowed on freight cars at ports, have been modified by amendments (Nos. 4 and 5, respectively), which set back the expiration dates from February 29 until May 31.

ORGANIZATIONS

Annual elections of the **Chicago Transportation Club** will be held during the March 4 meeting, to be held in the LaSalle Hotel. Radio commentator Paul Harvey will be the principal speaker on the program to follow the business session.

The 409th meeting of the **Pacific Railway Club** will be held on March 7, at 6:30 p.m., in the Newhouse Hotel, Salt Lake City, Utah. Colonel Samuel Rubin, professor of transportation at the University of Southern California, will speak on "Education and Transportation, Inc."

The **Pacific Northwest Advisory Board** will hold its 82nd regular and 26th annual meeting in the Multnomah Hotel, Portland, Ore., on March 20-21. Executive Vice-Chairman Lewis Pilcher of the Association of American Railroads' Freight Claim Division, and A. D. Carlton, manager, transportation department, Standard Oil Company of California, will be featured on the program.

SUPPLY TRADE

DEZENDORF HEADS ELECTRO-MOTIVE

Nelson C. Dezendorf, director of sales of the Electro-Motive Division of the General Motors Corporation, has been named general manager of the division succeeding the late B. A. Dollens. Mr. Dezendorf had been acting general manager since Mr. Dollens' death on February 9 (*Railway Age*, February 18, page 13).

Record Sales for Standard Railway Equipment Firm

Sales of the Standard Railway Equipment Manufacturing Company in 1951 totaled $35,162,452, largest in the firm's history, R. Arthur Williams, president, has announced. In 1950, sales amounted to $19,447,461. Net income in 1951, Mr. Williams added, was $3,203,507, compared with $2,609,420 in the preceding year. Unfilled orders at the year-end amounted to $24,500,000, compared with $28,400,000 at the end of 1950, $2,800,000 at the end of 1949 and $13,000,000 at the end of 1948.

The business of the **American Throttle Company** has been acquired by **Combustion Engineering-Superheater, Inc.** All matters pertaining to sales and service will, as in the past, be

Robert R. Andersen, who has been appointed sales representative for the Pyle-National Company, in the St. Paul, Minn., office.

J. W. Elwin, who has been appointed sales representative of the diesel locomotive division in the Chicago area for Fairbanks, Morse & Co. Mr. Elwin formerly was with the Great Northern and later with the Chicago & Eastern Illinois at Danville, Ill.

G. A. Griffin, who has been appointed assistant manager railroad sales for Erie Meter Systems, Inc., of Erie, Pa., with headquarters in a newly opened office at 405 Lexington avenue, New York. Mr. Griffin formerly was eastern railway representative of Bowser, Inc.

conducted by the latter's Superheater Company division.

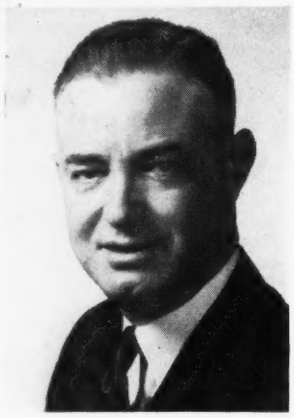
The **National Malleable & Steel Castings Co.** of Cleveland has contracted to purchase for cash all capital stock of the **Capitol Foundry Company** of Phoenix, Ariz., and its subsidiary, the **Arizona Iron Works.** Both companies will be operated as subsidiaries of National Malleable; **Edward A. Spring.** Capitol's president and general manager, will continue in the same capacity. A $1,500,000 program to expand and improve the Phoenix properties will be undertaken immediately.

J. E. Grogan has been appointed vice-president in charge of the eastern district for the **Ceco Steel Products Corporation,** of Chicago. **E. T. Gustafson** has been appointed vice-president and general counsel.

John S. Ewing has been appointed manager of stainless steel sales for the **United States Steel Company** at Pittsburgh.

John B. Perkins has been appointed vice-president in charge of sales of **J. H. Williams & Co.,** Buffalo, succeeding **E. J. Wilcox,** who has retired after 46 years of service.

Fred W. Smith, sales representative for *Railway Age* and other railway publications of the **Simmons-Boardman Publishing Corporation,** has been elected vice-president of the corporation. Mr. Smith was born at Coal Valley, Ala., on December 31, 1910, and received his education in structural engineering from the International Correspondence Schools. He entered railroad service in 1937 as a rodman-transitman for the Birmingham Southern at Birmingham, Ala., where he remained until 1941, when he became railroad engineer for Alford, Burdick & Howson, consulting engineers, Chicago. In



Fred W. Smith

1942 he joined the Chicago, Rock Island & Pacific as an engineer-estimator, and in 1945 joined Simmons-Boardman as an associate editor on the *Railway Engineering & Maintenance Cyclopedia.* From 1946 to 1947 he was associate editor in the purchases and stores department of *Railway Age,* and in the latter year was appointed sales representative.

Richard C. Lawson has been appointed assistant manager, railroad and spring sales department, of the **Crucible Steel Company of America,** with headquarters in New York. Mr. Lawson has been actively associated

John A. Brossart, Jr., who has been appointed assistant vice-president in charg. of production of the Standard Railway Equipment Manu'acturing Company, at Hammond, Ind.

Clinton H. Vescelius, who has been appointed general traffic manager of the Otis Elevator Company. Mr. Vescelius formerly was traffic manager of the tube department, RCA Victor division, Radio Corporation of America.

Richard C. Lawson

with Crucible's railroad sales department since joining the company in 1926. For several years he was located at the company's Chicago and Cleveland offices as a sales service engineer.

EQUIPMENT AND SUPPLIES

Domestic Equipment Orders Reported in February

Domestic orders for 1,500 freight cars were reported by individual purchaser in *Railway Age* in February. No passenger-car or locomotive orders were reported. Estimated cost of the freight cars is $9,000,000. An accompanying table lists the orders in detail.

During the first two months of 1952 *Railway Age* has reported domestic orders by individual purchaser for 7,632 freight-train cars costing an estimated $46,044,000; 102 diesel-electric locomotive units costing an estimated $13,094,000; and 92 passenger-train cars costing an estimated $4,143,016.

Freight Cars

Purchaser	No.	Type	Issue Reported	Builder
Carbon County	200	70-ton Triple Hopper	Feb. 25	Greenville Steel Car
C. & O.	1,000	70-ton Hopper	Feb. 18	Amer. Car & Fdy.
Ford Motor Co.	100	70-ton Gondola	Feb. 11	Greenville Steel Car
N.Y.C. & St. L.	200	70-ton Cov. Hopper	Feb. 11	Greenville Steel Car

FREIGHT CARS

The **Chicago, Milwaukee, St. Paul & Pacific** will construct 100 skeleton log flat cars in its Tacoma, Wash., shops. Depending on anticipated material deliveries, the road expects to build two cars daily beginning in mid-April.

The **Delaware & Hudson** has ordered one 246-ton flat car to be built in its own shops at an estimated cost of $36,000. Delivery is expected in the third quarter of this year.

The **Wabash** is currently constructing 20 steel cabooses in its own shops. Final delivery on the group, which cost an estimated $200,000, will be in April of this year.

The **Western Pacific** intends to place orders soon for 100 70-ton gondola cars and 100 70-ton ballast cars.

LOCOMOTIVES

The **Manistique & Lake Superior,** Ann Arbor subsidiary, has ordered a 660-hp. diesel switcher from the American Locomotive-General Electric Companies. Delivery is expected in the fall of this year.

The **New York Central** has ordered 24 1,600-hp. diesel-electric locomotive units (16 "A" and 8 "B"). from the American Locomotive-General Electric Companies.

SIGNALING

The **Central of Georgia** has placed an order with the Union Switch & Signal Division of Westinghouse Air Brake Company for material to install centralized traffic control on approximately 20 miles of single track between Sterrett, Ala., and Weems. In addition to the Style C control machine, the order includes Styles H-2 high searchlight signals, N-2 dwarf signals, M-23A dual control electric switch machines, T-21 switch stands, and the necessary relays, rectifiers and transformers. Field installation work will be handled by the railroad forces.

The **New York Central** (Boston & Albany) has ordered equipment from the General Railway Signal Company for the consolidation of relay interlocking at Framingham, Mass.

FINANCIAL

Parliament to Consider C. N. Finances

Proposals for overhauling the financial structure of the Canadian National are expected to highlight transportation legislation at the Canadian Parliamentary session which began in Ottawa on February 28. The purpose of such proposals will be to give the government owned C.N. a capital setup in line with a recommendation of the Royal Commission on Transportation last year (*Railway Age*, March 26, 1951, page 42).

Except for the 1951 freight-rate equalization bill, the C.N. recapitalization measure is said to shape up as the most important railway legislation in many years.

The Royal Commission recommended drastic adjustments in the road's top-heavy capital structure, which now skims about $45 million a year in fixed charges from what might otherwise be profits. Under a commission plan for simplifying the company's involved finances, the company would be put on what the commission regarded as a comparable basis with the Canadian Pacific. In normal years the C.N. would then be able to show a surplus, as the books would more closely reflect its efficient operation.

Parliament is also expected to authorize the C.N. to build a 43-mile line from Terrace, B. C., into the huge aluminum development at Kitimat.

Boston & Maine.—*Stock Adjustment.*—A minority stockholder group has asked the I.C.C. to vacate the order which approved this road's Mahaffie-Act stock modification plan. In a petition filed with the commission, the stockholder group said there is new evidence to be presented in the case. This evidence, the group said, became known for the first time during a recent court action in which the group attempted to have the I.C.C. order set aside. The court upheld the I.C.C.

The B.&M. proceeding dates from 1948. The commission gave final approval to a stock modification plan in January 1951. This plan, generally, would clear up dividend arrearages and simplify the road's capital structure (*Railway Age*, February 5, 1951, page 76). The minority group took the case to the U. S. District Court, Washington, D. C., and asked for a permanent injunction to prevent the road from putting the plan in effect.

While the Department of Justice participated in the court proceeding to support the I.C.C., it also introduced affidavits and depositions containing what the court called "serious charges of irregularity and fraud on the part of the railroad, its officers, agents and employees in the obtaining of (stockholder) assents to the modification plan."

The court, in its decision, said if these charges are true "a grave and serious fraud" has been perpetrated upon the I.C.C. At the same time the court said it was up to the commission to "sift, hear, evaluate and act upon the matters charged by the Justice Department." It suggested the minority group take the case back to the I.C.C., and this led to the filing of their latest petition with the commission.

Among other things, the minority group charged that the Old Colony Trust Company, as the depository when stockholders were voting on the modification plan, was actually under control of the B.&M. They claim also that certifications were inaccurate and invalid, that some invalid assents were counted as valid, that B.&M. officers and others made "improper and misleading representations" to stockholders to obtain assents for the plan, and that the correct number of assents had not been obtained at the close of the submission period.

The minority stockholder group consists of Mabel Benson Sakis, an individual, and Byron J. Harrill (deceased.)

Great Northern.—*Stock Option.*—The I.C.C. has approved this road's proposed stock option plan for officers and key employees. These employees will be granted options to purchase 150,000 shares of preferred stock. Some "35 to 55" officers and key employees will be eligible to participate in the plan, which will be administered by a committee of not less than three G.N.

directors. The stock is to be sold to the participants at 100 per cent of the market value on the day the option is granted; and an option may be exercised up to 10 years after it is granted. This stock option plan was adopted by the road in the belief that it would give officers additional incentive to promote the road's interests, induce continuity of service, and aid in obtaining and retaining able management personnel (*Railway Age*, December 24, 1951, page 45).

New York, Susquehanna & Western. — *Reorganization.* — Federal Judge William F. Smith last week reserved decision on confirmation of the reorganization plan for this road. Application for confirmation had been made by counsel for the New York Life Insurance Company—holder of a large amount of the road's bonds—and for other security holders, but an objection was raised by an owner of a small amount of the road's bonds.

New Securities

Application has been filed with the I.C.C. by:

ATLANTIC COAST LINE.—To issue and sell $22,000,000 of series B general mortgage bonds proceeds from which will be used to retire a like amount of series A general mortgage bonds. The latter mature July 1, 1952. The new bonds, with interest at 4¼ per cent, would be sold to a group of 16 banks and insurance companies. The investment institutions have agreed to purchase them for long-term investments and not for redistribution. Largest single purchase will be that of Equitable Life Assurance Society, which has agreed to take $10,000,000 of the new issue. The A.C.L. recently obtained I.C.C. authority to negotiate for sale of the bonds without competitive bidding (*Railway Age*, January 28, page 54). The new bonds, dated June 30, 1952, would mature July 1, 1972.

BALTIMORE & OHIO.—To assume liability for $3,870,000 of series DD equipment trust certificates, to finance in part 1,000 50-ton hopper cars. The cars will cost approximately $4,850 each, and will be built by Pullman-Standard Car Manufacturing Company. The certificates, dated March 1, would mature in 15 annual installments of $258,000 each, beginning March 1, 1953.

Division 4 of the I.C.C. has **authorized:**

CHESAPEAKE & OHIO.—To assume liability for $8,250,000 of equipment trust certificates, to finance in part 25 diesel-electric locomotive units and 1,060 freight cars costing an estimated $10,411,246 (*Railway Age*, February 11, page 80). Division 4 approved sale of the certificates for 99.335 with interest at 2⅞ per cent—the bid of Salomon Bros. & Hutzler and three associates—which will make the average annual cost of the proceeds to the road approximately 2.98 per cent. The certificates, to be dated March 1, will mature in 30 semiannual installments of $275,000 each, beginning September 1, 1952.

The certificates were reoffered to the public at prices yielding from 2 to 3 per cent, according to maturity.

CHICAGO & EASTERN ILLINOIS.—To assume liability for $2,100,000 of series I equipment trust certificates, to finance in part 385 hopper cars and 100 box cars. Estimated total cost of these cars is $2,628,025 (*Railway Age*, February 11, page 80). Division 4 approved sale of the certificates for 99.566 with interest at 3⅛ per cent—the bid of Salomon Bros. & Hutzler and associates—which will make the average annual cost of the proceeds approximately 3.19 per cent. The certificates, dated February 1, will mature in 30 semiannual installments of $70,000 each, beginning August 1, 1952. They were reoffered to the public at prices yielding from 2.15 to 3.25 per cent, according to maturity.

TENNESSEE CENTRAL.—To assume liability for $634,000 of series G 4 per cent equipment trust notes, to finance in part four 1,600-hp. diesel-electric road-switchers, to cost an estimated $158,505 each (*Railway Age*, February 18, page 57). The Reconstruction Finance Corporation has already agreed to purchase the notes at par. The notes, dated February 1, will mature in 30 semiannual installments of $22,000 each, beginning August 1, 1952. Altogether, the R.F.C. has agreed to make loans to this road totaling $2,249,800, under the Defense Production Act. The Tennessee Valley Authority is building a large steam plant at Kingston, Tenn., to be served by this road. The plant will use about 1,000,000 tons of coal a year (*Railway Age*, February 4, page 95).

UNION (Pittsburgh).—To issue a note for $700,000 to the United States Steel Corporation, proceeds from which will be used to finance in part 120 gondola cars, costing an estimated $720,000. The note, with interest at 3¼ per cent, will mature in 20 semiannual installments of $35,000 each. This note is the second of three which Union is issuing to U. S. Steel in connection with acquisition of new equipment (*Railway Age*, January 7, page 70, and February 11, page 82).

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways)

(Switching and Terminal Companies Not Included)

United States

Income Items	For the month of October 1951	For the month of October 1950	For the ten months of 1951	For the ten months of 1950
1. Net railway operating income	$121,899,695	$134,459,629	$712,734,463	$815,072,305
2. Other income	18,244,433	17,794,309	184,054,694	188,038,410
3. Total income	140,144,128	152,253,938	896,789,157	1,003,110,715
4. Miscellaneous deductions from income	4,214,377	4,036,865	46,687,306	38,707,566
5. Income available for fixed charges	135,929,751	148,217,073	850,101,851	964,403,149
6. Fixed charges:				
6–01. Rent for leased roads and equipment	9,393,028	11,897,356	92,121,356	102,931,407
6–02. Interest deductions[1]	25,447,903	25,053,302	249,943,759	250,505,436
6–03. Amortization of discount on funded debt	248,544	234,639	2,384,262	2,223,164
6–04. Total fixed charges	35,089,475	37,185,297	344,449,377	355,660,007
7. Income after fixed charges	100,840,276	111,031,776	505,652,474	608,743,142
8. Other deductions	3,000,767	3,272,329	31,096,518	32,365,336
9. Net income	97,839,509	107,759,447	474,555,956	576,377,806
10. Depreciation (Way and structures and Equipment)	37,729,060	36,470,703	374,207,313	356,186,729
11. Amortization of defense projects	5,306,080	1,279,513	39,557,058	13,615,390
12. Federal income taxes	71,238,939	86,904,307	448,806,238	429,227,945
13. Dividend appropriations:				
13–01. On common stock	14,649,827	14,065,088	163,548,938	137,169,811
13–02. On preferred stock	4,773,286	12,232,312	73,855,497	58,870,043
Ratio of income to fixed charges (Item 5 ÷6—04)	3.87	3.99	2.47	2.71

United States

Selected Expenditure and Asset Items	Balance at end of October 1951	Balance at end of October 1950
17. Expenditures (gross) for addition and betterments—Road	$281,864,402	$221,932,156
18. Expenditures (gross) for additions and betterments—Equipment	857,265,917	657,124,737
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	477,507,644	467,433,202
20. Other unadjusted debits	116,493,050	108,084,567
21. Cash	884,931,457	999,063,502
22. Temporary cash investments	874,659,702	1,008,341,230
23. Special deposits	61,928,349	135,429,427
24. Loans and bills receivable	2,039,823	1,030,298
25. Traffic and car-service balances—Dr.	62,786,278	62,048,140
26. Net balance receivable from agents and conductors	174,431,473	165,345,821
27. Miscellaneous accounts receivable	393,878,647	378,328,916
28. Materials and supplies	911,728,065	699,974,311
29. Interest and dividends receivable	13,787,229	14,780,300
30. Accrued accounts receivable	219,480,030	211,034,877
31. Other current assets	35,195,220	37,784,264
32. Total current assets (items 21 to 31)	3,635,846,273	3,713,161,086
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$166,737,586	$146,863,049
41. Loans and bills payable[3]	3,815,485	1,915,869
42. Traffic and car-service balances—Cr.	101,371,009	106,610,921
43. Audited accounts and wages payable	557,506,662	513,122,973
44. Miscellaneous accounts payable	196,262,876	250,301,943
45. Interest matured unpaid	29,106,128	30,175,644
46. Dividends matured unpaid	3,879,633	3,772,589
47. Unmatured interest accrued	80,181,723	78,103,676
48. Unmatured dividends declared	32,473,996	41,216,296
49. Accrued accounts payable	252,829,829	188,409,518
50. Taxes accrued	877,035,275	829,741,453
51. Other current liabilities	95,029,692	97,742,788
52. Total current liabilities (items 41 to 51)	2,229,492,308	2,141,113,670
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	696,451,587	661,427,799
53–02. Other than U. S. Government taxes	180,583,688	168,313,654
54. Other unadjusted credits	302,155,652	298,657,017

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

Security Price Averages

	Feb. 26	Prev. Week	Last Year
Average price of 20 representative railway stocks	55.22	55.22	57.17
Average price of 20 representative railway bonds	92.38	91.93	99.90

Dividends Declared

AKRON, CANTON & YOUNGSTOWN.—common, $2, payable April 1 to holders of record March 15; 5% preferred, $2.50, semiannual, payable April 1 and October 1 to holders of record March 15 and September 15.

KANSAS CITY SOUTHERN.—common, $1.25, payable March 15 to holders of record February 29; 4% preferred, $1, quarterly, payable April 15 to holders of record March 31.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—$1, payable March 31 to holders of record March 14.

PITTSBURGH, FT. WAYNE & CHICAGO.—common, $1.75, quarterly; 7% preferred, $1.75, quarterly, both payable April 1 to holders of record March 10.

ST. LOUIS SOUTHWESTERN.—5% preferred, $5, payable March 7 to holders of record February 29.

SOUTHERN PACIFIC.—$1.25, quarterly, payable March 24 to holders of record March 3.

Freight Cars By the Thousands!

ILLINOIS CENTRAL

Keeping pace with the needs of its shippers, the Illinois Central each year produces thousands of new freight cars in its own shops. Modern production line methods turn out box cars for industry and commerce, hopper cars for coal, flat cars for heavy machinery, special cars for many purposes. In the past half dozen years the Illinois Central has spent 100 million dollars on new cars and locomotives.

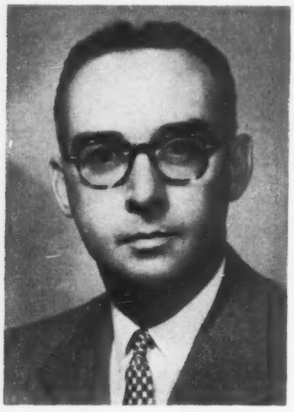
ILLINOIS CENTRAL RAILROAD

Main Line of Mid-America

RAILWAY OFFICERS

EXECUTIVE

As reported in *Railway Age* November 12, page 68, **K. M. Kerr** has been appointed assistant vice-president (traffic) of the ATLANTIC COAST LINE at Wilmington, N. C. Mr. Kerr was born at New Albany, Ind., and was graduated from the University of Kentucky in 1933. He began his railroad career with the Louisville & Nashville at Louisville in 1934 and entered the service of the A.C.L. on January 1, 1938, as chief clerk to the division freight agent at Jacksonville, Fla., subsequently serving as soliciting



K. M. Kerr

freight agent and traveling freight agent at Jacksonville, and as commercial agent at Sumter, S. C. After service in the U. S. Army from January 1944 to February 1946, he rejoined the A.C.L. as assistant chief clerk to vice-president and was named chief clerk in March 1947. Mr. Kerr was promoted to assistant to vice-president on July 1, 1949, which position he held until his recent appointment.

C. M. Yohe, vice-president of the MONTOUR and YOUNGSTOWN & SOUTHERN, has been elected president of these roads at Pittsburgh, Pa., succeeding **J. A. Appleton,** who has been elected vice-president of the two roads.

Jose Rivera Rosales, president of the Mexican Confederation of Chambers of Commerce, has been named president of the former SOUTHERN PACIFIC of MEXICO. The name of the railroad, recently purchased by the Mexican government from the Southern Pacific (*Railway Age*, December 31, 1951, page 57), reportedly has been temporarily changed to SUD PACIFICO DE MEXICO-GOBIERNO DE MEXICO.

As reported in *Railway Age* November 12, page 68, **George M. Mann** has been appointed assistant to the vice-president (traffic) of the ATLANTIC COAST LINE at Wilmington, N. C. Mr. Mann was born at Atlanta, Ga., and entered the service of the A.C.L. as a tariff rate clerk at Wilmington on January 1, 1930. He served as rate clerk in the commerce department from 1935 until 1940, when he was assigned to the office of the freight traf-

George M. Mann

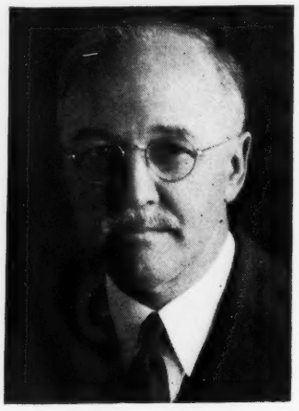
fic manager. On April 1, 1950, he was appointed assistant to general freight agent and on January 1, 1951, was named assistant general freight agent at Wilmington, which position he held at the time of his recent appointment.

Joseph N. Broetzman has been named assistant vice-president of operations of the SEABOARD AIR LINE at Norfolk, Va. Mr. Broetzman has been in Norfolk since September of last year in the capacity of general superintendent, acting as assistant vice-president for operations. He was born at Coblenz, Germany, on May 7, 1904, and began his career with the Seaboard in 1923 as

Joseph N. Broetzman

a telegrapher. Subsequently, he served as train dispatcher, chief dispatcher, assistant trainmaster, trainmaster and terminal superintendent, all at Hamlet, N. C. In 1947 he became superintendent at Jacksonville and the following year was appointed assistant general manager at Savannah, Ga. In December 1950 Mr. Broetzman was named general superintendent.

Richard C. Morse, vice-president—real estate and taxation of the PENNSYLVANIA at Philadelphia retired on January 1, as announced in *Railway Age* December 17. Mr. Morse was born at Cleveland on March 18, 1882, and was graduated from Yale University (Ph.B. 1906). He began his railroad career with the P.R.R. two years later as a yard clerk and moved up progressively in the operating department. During World War I he was



Richard C. Morse

assistant chief of embarkation of the United States Army, with service here and abroad, and in 1922 was a delegate from the Pennsylvania to the International Railway Congress in Rome, Italy. Mr. Morse was appointed general manager of the Pennsylvania at New York in 1934 and served as vice-president of the Eastern region at Philadelphia from 1935 until 1946, when he became vice-president—real estate and taxation.

F. Clifton Toal, general industrial agent of the SOUTHERN SYSTEM at Charlotte, N. C., has been appointed assistant vice-president in charge of the industrial and agricultural development department at Washington, D. C., succeeding **Richard W. Wirt,** who has retired after more than 54 years of service with this system. **Walter H. Beard,** general western freight agent at Chicago, has been appointed executive general agent at Jacksonville, Fla., succeeding **Charles F. Lauer,** who has retired after more than 50 years of service with the Southern.

FINANCIAL, LEGAL & ACCOUNTING

As announced in *Railway Age*, December 24, **A. A. Griesbauer** has been appointed auditor disbursements of the MISSOURI PACIFIC, and **Maurice Rittmaster** has been named assistant general auditor, both with headquarters in St. Louis. Mr. Griesbauer entered railway service with the M.P. in 1920 as clerk in the division ac-

It's what's up here that counts!

We really aim to do our job of freight transportation so well that you'll continue to route freight our way, year after year.

That kind of service means putting to good use ***for you,*** the experience gained throughout many years in handling freight for shippers and receivers in your particular industry.

A railroad must not only have the equipment and facilities to give you fast, dependable service but also have traffic representatives who understand and speak your language. In short, "it's what's up here" that counts. We'll be very pleased to serve you at any time.

• • •

Need passenger reservations? All departments of Union Pacific work closely together. The representative you know will be glad to help you with your travel problems.

Be Specific – Ship "Union Pacific"

(Offices in 70 cities throughout the U. S. A.)

countant's office in St. Louis, transferring in 1921 to the auditor disbursements' office. He was named traveling accountant in 1924, and became traveling joint facility examiner in 1933. He was appointed assistant chief joint facility examiner in 1946, and chief joint facility examiner in 1947. In 1949, Mr. Griesbauer was appointed assistant auditor disbursements, which position he held until his recent appointment.

Mr. Rittmaster started his railway service in 1906 with the Great Northern, remaining there until 1917 when he entered the Army. Upon his return from military service in 1919, he was special accountant for the St. Louis Southwestern until 1921, when he joined the Mississippi River & Bonne Terre (now Missouri-Illinois) as assistant auditor. He went with the M.P. at St. Louis in 1929, when that company acquired control of the Missouri-Illinois. In 1939 he was appointed general accountant, which position he held until his recent appointment.

Charles L. Pattison, general accountant for the TOLEDO, PEORIA & WESTERN, has been appointed comptroller. His former duties have been assumed by **Walter J. Nelson.** Mr. Pattison began service with the

Charles L. Pattison

T.P.&W. in 1929 as a file clerk He was transferred to the freight accounting department in 1934 and then to the comptroller's office as a bookkeeper. He was named special accountant in 1942 and general accountant in 1947.

TRAFFIC

R. Stanley Souther, general agent, freight and passenger departments, SOUTHERN SYSTEM, at Pittsburgh, has been appointed assistant freight traffic manager at Cincinnati, succeeding **James W. Lee,** who has been transferred to Atlanta, Ga., to replace **A. L. Day,** retired because of ill health. **George W. Elder, Jr.,** general agent at San Francisco, succeeds Mr. Souther at Pittsburgh. **Elmore A. Evers,** commercial agent, has been appointed district freight and passenger agent, with headquarters as before at Montgomery, Ala., succeeding **W. Dean Gallaway,** promoted to assistant general freight agent at Columbia, S. C. Mr. Gallaway succeeds **W. R. Belfield,** who has been appointed general industrial agent at Charlotte, N. C., to replace **F. Clifton Toal,** who has been named assistant vice-president in charge of the industrial and agricultural development department at Washington, D. C.

Mr. Souther was born at Shelter Island, N. Y., on September 6, 1905, and entered the employ of the Southern as a clerk at Washington in August 1924. After serving as secretary to the assistant passenger traffic manager and to the vice-president (traffic) at Washington, he became freight traffic representative at Atlanta and district freight agent at Boston, successively. In December 1942 Mr. Souther was appointed New England freight agent and in January 1946 was promoted to assistant general freight agent at Washington. He became general agent at Pittsburgh in July 1947.

Mr. Day was born at Tyler, Ala., on January 18, 1893, and entered the service of the Southern in October 1917 as a baggage agent at Anniston, Ala. He later served as freight traffic representative at Selma, Ala., and Birmingham; commercial agent at Hattiesburg, Miss., Meridian and Atlanta; district freight and passenger agent at Evansville, Ind.; and assistant general freight agent at Atlanta. Mr. Day was promoted to assistant freight traffic manager at Atlanta in February 1940.

R. L. Beiswenger has been appointed to the newly created position of assistant general freight and passenger agent of the MISSOURI-KANSAS-TEXAS at Pittsburgh, Pa. The position of general agent at Pittsburgh, formerly held by Mr. Beiswenger, was abolished.

A new traffic agency of the NASHVILLE, CHATTANOOGA & ST. LOUIS was opened on March 1 in Pittsburgh. **Kenneth E. Skillman,** general agent, will be in charge of the agency, which will be located in the Koppers building.

Ray B. Birchard, city freight agent for the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed assistant general freight agent at Chicago.

O. H. Griffin, has been appointed to the newly created position of general freight and passenger agent of the MISSOURI-KANSAS-TEXAS, at Houston, Tex. His former position, assistant general freight and passenger agent, has been abolished.

George J. Adamcik, traveling freight and passenger agent for the NORTHERN PACIFIC at Dallas, Tex., has been appointed general agent, succeeding **Charles Sorg, Jr.,** retired.

E. C. Beason has been appointed general agent for the CHICAGO, INDIANAPOLIS & LOUISVILLE, at Birmingham, Ala. The position of district traffic manager has been abolished.

Chris Constance has been appointed general agent for the MISSOURI PACIFIC at Oklahoma City, Okla., succeeding **C. C. Hart,** retired.

George Bauer has been appointed assistant traffic manager of the AKRON, CANTON & YOUNGSTOWN at Akron, Ohio, and not traffic manager, as was erroneously reported in *Railway Age* February 18, page 58.

E. G. Huston has been appointed assistant general freight agent of the ATLANTIC COAST LINE, the CHARLESTON & WESTERN CAROLINA and the COLUMBIA, NEWBERRY & LAURENS, at Columbia, S. C. **W. T. Quarles** has been appointed general agent of the A.C.L. at Columbia.

MECHANICAL

Harold E. Niksch, master mechanic of the ELGIN, JOLIET & EASTERN, has been appointed superintendent, motive power and equipment, succeeding **Paul H. Verd,** who has been promoted to general superintendent. **George W. Burnett,** mechanical inspector, succeeds Mr. Niksch.

OPERATING

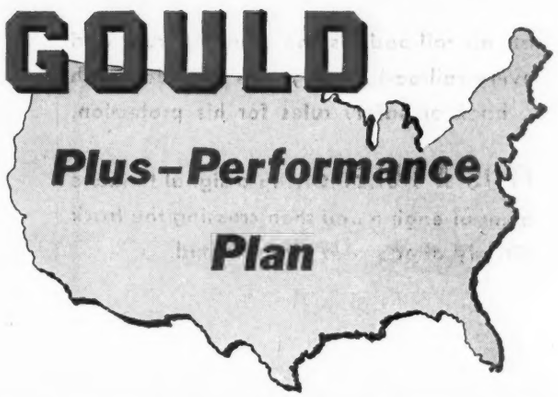
G. A. Cunningham, Utah division superintendent of the UNION PACIFIC, at Salt Lake City, has been appointed general superintendent at Cheyenne, Wyo., and is succeeded by **W. B. Groome,** assistant superintendent at

G. A. Cunningham

Salt Lake City. **C. C. Larkin** has been named Idaho division superintendent at Pocatello, Idaho (*Railway Age*, January 21).

Mr. Cunningham began his railroad career in 1923 with the Southern Pacific, joining the U.P. as a brakeman and switchman in 1940. Subsequently, he was conductor, traveling conductor, trainmaster and assistant superinten-

(*Continued on page 92*)



FOR LONGEST BATTERY SERVICE,

TEMPERATURE READINGS ARE VITAL!

Specific gravity readings, unless corrected for the temperature of the electrolyte at the time they are taken, do not always give a true indication of battery condition. How to make these corrections is explained briefly below. More complete information on this important subject is contained in the vast library of technical information—covering every phase of battery care—available to you free, without obligation, with the GOULD PLUS-PERFORMANCE PLAN. Use this Plan consistently and you can improve your battery performance as much as 50%! Send for this free booklet describing the Plan in detail.

HOW TO CORRECT SP. GR. READINGS FOR TEMPERATURE

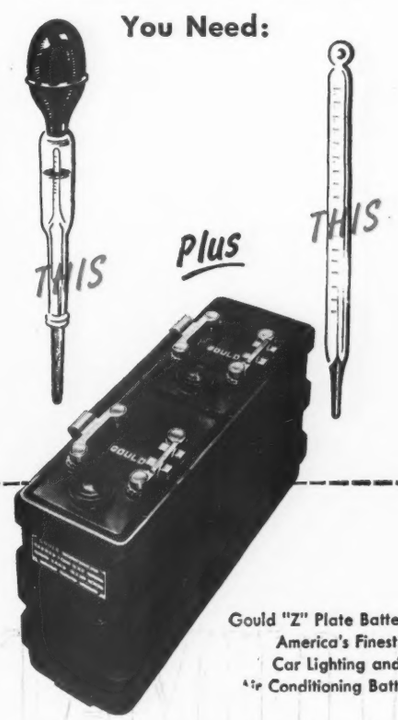
For a true picture of battery condition, each specific gravity reading must be corrected in accordance with the temperature of the electrolyte at the time the reading is taken.

To make such a correction, add one point (.001) in specific gravity to the actual hydrometer reading for each 3° F. in electrolyte temperature above 77° F.; and subtract one point (.001) in specific gravity from the actual hydrometer reading for each 3° F. below 77° F.

EXAMPLE:

HYDROMETER READING	CELL TEMPERATURE	CORRECTION	READING CORRECTED TO 77° F.
1.213 Sp. Gr.	68° F.	−.003 points	= 1.210 Sp. Gr.
1.207 Sp. Gr.	86° F.	+.003 points	= 1.210 Sp. Gr.
1.204 Sp. Gr.	95° F.	+.006 points	= 1.210 Sp. Gr.

For Correct Specific Gravity Reading You Need:



Gould "Z" Plate Batteries—
America's Finest
Car Lighting and
Air Conditioning Batteries

GOULD STORAGE BATTERIES

GOULD-NATIONAL BATTERIES, INC., TRENTON 7, NEW JERSEY

Always Use Gould-National Automobile and Truck Batteries

When what you've got has got to go!

call Santa Fe

Your Santa Fe man knows how to get your freight going. Let him put the vast Santa Fe freight operations to work for you. It's easy—just call the Santa Fe office nearest you!

F. H. Rockwell, Gen. Freight Traffic Manager
Santa Fe System Lines Chicago, Illinois

(*Continued from page* 86)

dent. He was appointed superintendent at Salt Lake City in 1948.

Mr. Groome entered railroad service

W. B. Groome

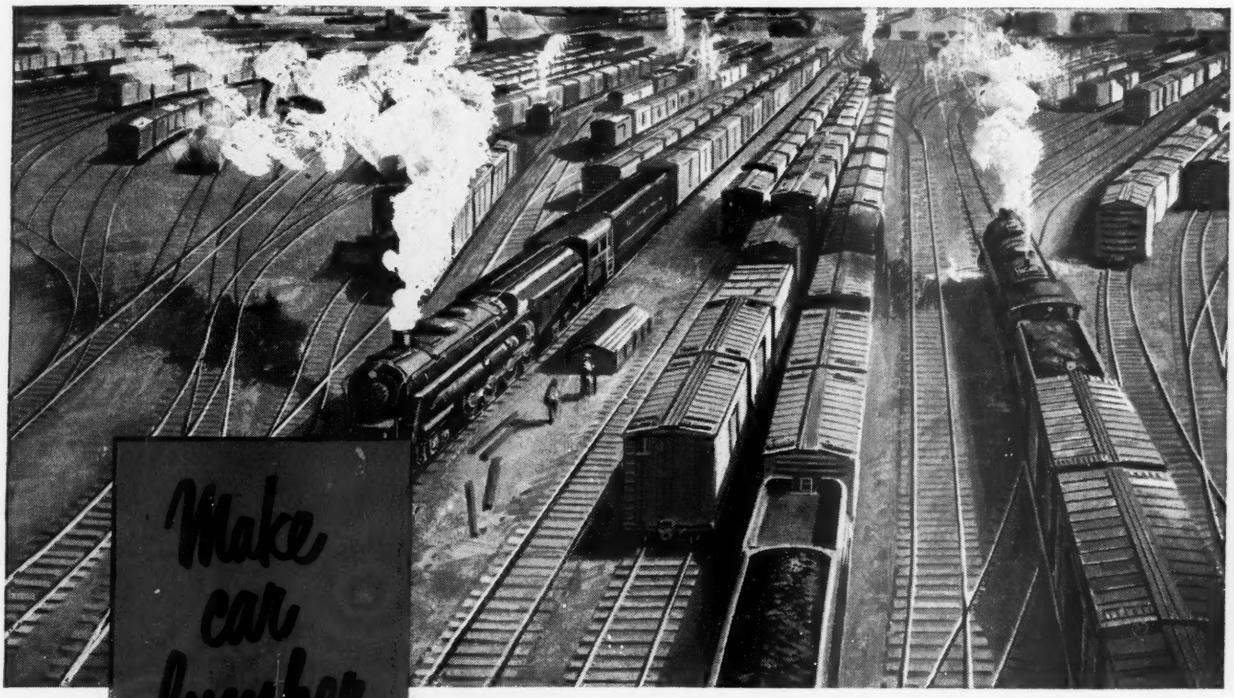
as a timekeeper in 1923. He served as trainmaster at Salt Lake City, and was appointed assistant superintendent at that point in 1947.

C. C. Larkin

Mr. Larkin started as a trackman with the Santa Fe in Kansas in 1933. He came to the U.P. in 1936 and filled a series of jobs in Nevada and Utah until he was appointed assistant superintendent at Salt Lake City in 1946.

The CHICAGO & NORTH WESTERN has reorganized several operating divisions, with the following personnel changes: **N. L. Waterman,** superintendent, Wisconsin division, appointed chief of yard and terminal operations at Chicago, with jurisdiction over yard and terminal operations for the entire system; **L. G. Bean,** assistant superintendent, Wisconsin division, named superintendent of the newly created Chicago Passenger Terminal division, covering all passenger train and passenger yard operations in the Chicago area; **J. R. Cantwell,** superintendent, Galena division, promoted to superintendent of Chicago freight terminals, at Proviso, Ill.; **R. W. Heron,** superintendent, Madison division, ap-

NOW! when maintenance is more important than ever



use Penta*-Protected wood

Heavy traffic does not *have* to mean more maintenance for busy equipment. You can cut maintenance by protecting car lumber, and all lumber, with PENTA . . . and give your wood longer, more dependable life.

PENTA protects wood against termites and decay, gives wood greater serviceability. PENTA-PROTECTED WOOD is clean, easy to handle and can be painted. PENTA is economical, too!

Railroad service records *prove* that treated wood lasts three to four times longer than untreated wood. This means that PENTA-PROTECTED WOOD costs you *less per year!*

USE PENTA-PROTECTED WOOD not only for car lumber but also for poles, loading platforms, all wood buildings and other wood construction. Protect your investment in wood. Make it a *sure* thing . . . with PENTA!

INVESTIGATE Penta THE CLEAN WOOD PRESERVATIVE

*PENTA is a popular abbreviation of the name of the chemical, PENTAchlorophenol.

THE DOW CHEMICAL COMPANY
MIDLAND, MICHIGAN

DOW
Penta
chlorophenol

A NEW Service to Railroads
• PRESSURE CREOSOTED TREATMENT
• PRESSURE PENTACHLOROPHENOL TREATMENT
• Treated in our modern, new treating plant at Diboll, Texas. Write or call for price information.
SOUTHERN PINE LUMBER CO.
MILLS: DIBOLL and PINELAND, TEXAS
SALES OFFICE: TEXARKANA, TEXAS
POLES TIMBER LUMBER PILING FENCE POSTS
Pressure
TREATED
MATERIALS

pointed to succeed Mr. Waterman; **E. E. Coover,** superintendent, Dakota division, to succeed Mr. Cantwell; **L. C. Reynolds,** superintendent, Peninsula division, at Escanaba, Mich., to succeed Mr. Heron; **A. T. Peagan,** assistant superintendent, Lake Shore division, at Green Bay, Wis., to succeed Mr. Coover; and **George C. Stuart,** joint superintendent, iron ore district, at Ironwood, Mich., to succeed Mr. Reynolds.

The Northern Iowa and Iowa divisions have been consolidated and will be known as the Iowa division. Jurisdiction will be under the western district at Omaha, Neb. **F. L. Houx,** superintendent of freight terminals at Chicago, has been appointed superintendent of the new division, with headquarters at Boone, Iowa. Prior to the consolidation, the late **M. J. Williams** had been superintendent of the Iowa division. **E. E. Terrill,** superintendent, Northern Iowa division, has been appointed assistant superintendent of the new Iowa division, at Mason City, Iowa, and has charge of the Mason City district of the Iowa division.

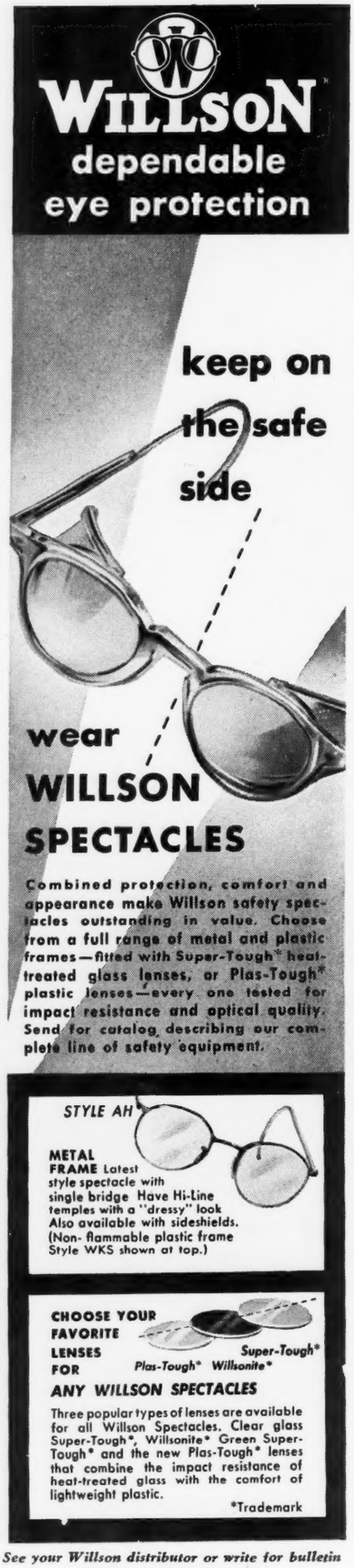
Lloyd B. Coursey, assistant superintendent terminals of the SOUTHERN SYSTEM, has been promoted to superintendent of terminals, with headquarters remaining at Atlanta, Ga. He succeeds **David C. Ferguson,** who has been appointed assistant vice-president, yards and terminals. **John A. Garmon,** terminal trainmaster at Atlanta, succeeds Mr. Coursey.

E. M. Gray, whose recent appointment as superintendent of terminals of the ST. LOUIS-SAN FRANCISCO at Tulsa, Okla., was reported by *Railway Age* January 14, started with the Frisco in 1922 as brakeman on the Central division. He became a switchman in 1925

E. M. Gray

and in 1943 was appointed general and assistant general yardmaster at Monett, Mo. In 1948 he was appointed trainmaster at Springfield, Mo., and in 1949 was transferred to Kansas City, Mo.

J. K. Beshears, whose appointment as superintendent of terminals at Birmingham, Ala., was also announced in


WILLSON
dependable
eye protection
keep on
the safe
side
wear
WILLSON
SPECTACLES
Combined protection, comfort and appearance make Willson safety spectacles outstanding in value. Choose from a full range of metal and plastic frames—fitted with Super-Tough* heat-treated glass lenses, or Plas-Tough* plastic lenses—every one tested for impact resistance and optical quality. Send for catalog describing our complete line of safety equipment.
STYLE AH*
METAL FRAME Latest style spectacle with single bridge Have Hi-Line temples with a "dressy" look Also available with sideshields. (Non-flammable plastic frame Style WKS shown at top.)
CHOOSE YOUR FAVORITE LENSES FOR
Plas-Tough* Willsonite* Super-Tough*
ANY WILLSON SPECTACLES
Three popular types of lenses are available for all Willson Spectacles. Clear glass Super-Tough*, Willsonite* Green Super-Tough* and the new Plas-Tough* lenses that combine the impact resistance of heat-treated glass with the comfort of lightweight plastic.
*Trademark

See your Willson distributor or write for bulletin

WILLSON PRODUCTS, INC.

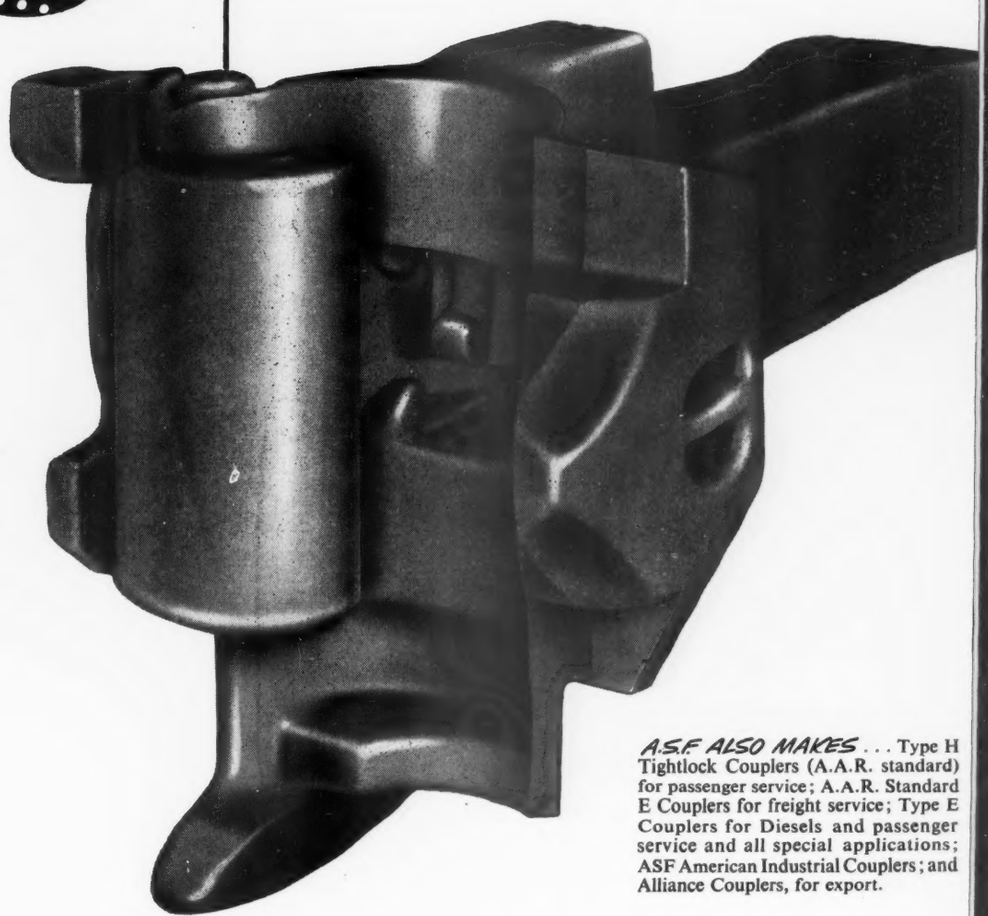
241 Washington St., Reading, Pennsylvania

Anti-Creep protection!

ASF

Type F Interlocking Couplers

FOR FREIGHT SERVICE



Reduced . . . the danger of accidental uncoupling! The rotary locklift arrangement of the Type F (proposed A.A.R. standard) Interlocking Coupler gives *threefold* anti-creep protection.

First, a special overlapping toggle arrangement keeps the lock from jumping upward when there is vertical oscillation of the car. Second, this same overlapping toggle principle prevents unlocking when there is a run-in of slack combined with car bounce or coupler droop. Third, also in connection with run-in of slack and car bounce, the anti-creep shoulder of the rotor lever jaw strikes an abutment of the coupler head, for further protection.

Ask for ASF folder C2! It illustrates and explains these features in detail. You'll want to investigate, then specify ASF-built Type F Interlocking Couplers for new freight cars.

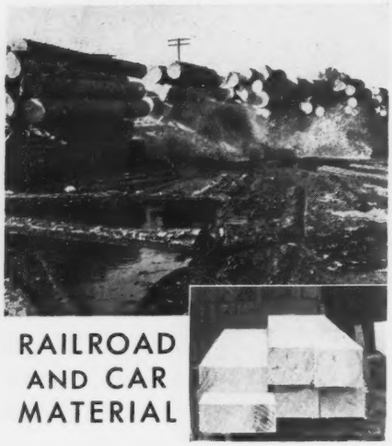
A.S.F. ALSO MAKES . . . Type H Tightlock Couplers (A.A.R. standard) for passenger service; A.A.R. Standard E Couplers for freight service; Type E Couplers for Diesels and passenger service and all special applications; ASF American Industrial Couplers; and Alliance Couplers, for export.

AMERICAN STEEL FOUNDRIES

410 N. Michigan Ave., Chicago 11, Illinois • Canadian Sales: International Equipment Co., Ltd., Montreal 1, Quebec

Mint Mark of ⬡ Fine Products

BIG MILL QUALITY
AND SERVICE



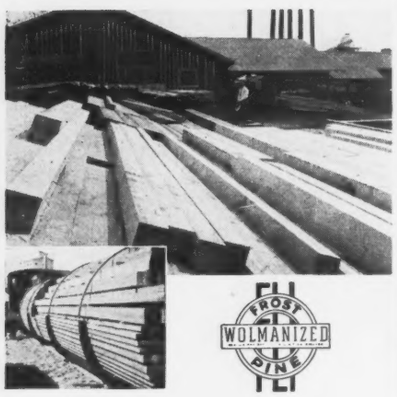
RAILROAD
AND CAR
MATERIAL

Operating large capacity sawmills in three states, based on perpetual timber yield, we are equipped to supply schedules of any size or specification now and *always*.

★

TIES AND TIMBERS
IN
PINE AND HARDWOOD

★



CREOSOTED
WOLMANIZED* AND MINALITH
TREATED MATERIAL

*Reg. U.S. Pat. Off.

BRIDGE TIMBERS
POSTS PILING

Frost Lumber Industries
Division of Olin Industries, Inc.
SHREVEPORT, LOUISIANA

Railway Age January 14, began with the Frisco in 1936 as a brakeman. Subsequently, he became freight conductor,

J. K. Beshears

yardmaster, passenger conductor, safety supervisor and terminal trainmaster. In 1950, he was named assistant superintendent of the Southern division at Amory, Miss.

The SOUTHERN PACIFIC has renamed its telegraph department to communications department. **A. E. DeMattei's** title has been changed from superintendent of telegraph to superintendent of communications.

P. T. Moran, general superintendent of the ELGIN, JOLIET & EASTERN, has been appointed general manager at Chicago. **Paul H. Verd,** superintendent motive power and equipment, succeeds Mr. Moran.

R. L. Wood has been appointed trainmaster of the INDIANA HARBOR BELT, at Gibson, Ind.

V. Parvin has been appointed general manager of the TUSKEGEE RAILROAD.

SPECIAL

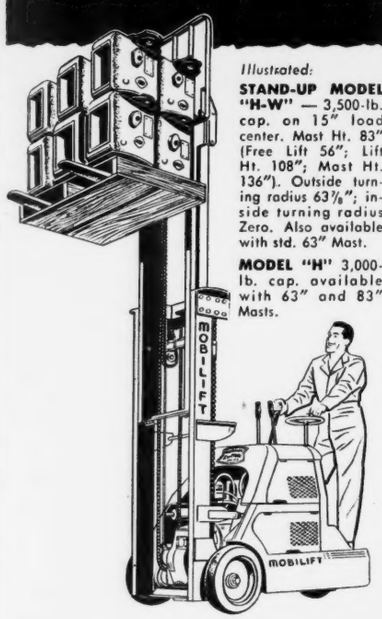
R. G. Smith, supervisor of safety of the Cincinnati division of the PENNSYLVANIA, has been transferred to the Ft. Wayne division. **John A. Furney,** engineman — special duty, Columbus division, succeeds Mr. Smith on the Cincinnati division.

OBITUARY

Floyd B. Bennett, 53, lighterage agent of the PENNSYLVANIA at New York, died on February 17 at his home in Elizabeth, N. J., following a short illness.

Charles C. Cameron, retired vice-president in charge of traffic of the ILLINOIS CENTRAL and a veteran of 45 years of service with the railroad, died recently at Miami, Fla.

NOW Available
the New
MOBILIFT
3500 Pounder
Lev-R-Matic DRIVE
Fork Lift Truck



Illustrated:
STAND-UP MODEL "H-W" — 3,500-lb. cap. on 15" load center. Mast Ht. 83" (Free Lift 56"; Lift Ht. 108"; Mast Ht. 136"). Outside turning radius 63⅞"; inside turning radius Zero. Also available with std. 63" Mast.
MODEL "H" 3,000-lb. cap. available with 63" and 83" Masts.

Created to meet a demand!
This is the new model that MOBILIFT engineers developed to meet specific needs in all types of industry to help speed production and cut handling costs.
Not a single MOBILIFT maneuverability feature found in smaller models has been sacrificed in this versatile model.

EXCLUSIVE FEATURES:
- **LEV-R-MATIC CONTROLS** Push-Pull levers — No gears to shift.
- **MOBIL-CHAIN LIFT.** Unobstructed view between uprights.
- **MOBILIFT AIR-COOLED 3-CYL. ENGINE.**

MOBILIFT Lev-R-Matic DRIVE
WRITE TODAY for complete specifications on this new "H" series.

MOBILIFT
CORPORATION
835 S.E. MAIN • PORTLAND 14, ORE.
CHICAGO • E. RUTHERFORD, N. J.
ATLANTA • BERKELEY • DALLAS